DOCUMENT RESUME

ED 334 094 SO 021 190

AUTHOR Philips, David, Ed.
TITLE Educational Research for the Future: The Challenges of the Next 15 Years.
INSTITUTION New Zealand Council for Educational Research, Wellington.
REPORT NO ISBN-0-908567-62-6
PUB DATE 86
NOTE 103p.; Papers presented at the New Zealand Council for Educational Research Invitational Seminar (Wellington, New Zealand, June 14-15, 1984).
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Educational Development; *Educational Research; Elementary Secondary Education; Foreign Countries; *Futures (of Society); Seminars
IDENTIFIERS New Zealand

ABSTRACT

The 1984 Annual Meeting of the New Zealand Council for Educational Research celebrated its 50th jubilee and marked the retirement of John Waston (Director, 1968-1984) by organizing an invitational seminar. The proceedings of this seminar features 13 presentations: "Introduction" (David Philips); "Official Welcoming Address" (M. L. Wellington); "Where Are We Going From 1984: Challenges to Educational Research" (Noeline Alcorn); "Fifty Plus Fifteen Equals 2000" (David McKenzie); "A Secondary School Principal's Views on Directions for Educational Research" (Turoa K. Royal); "A Primary School Principal's Views on Directions for Educational Research" (Wally Hirsh); "The Economy and Education" (Frank Holmes); "The Individual and Education" (Ivan Snook); "Society and Education" (Jack Shallcrass); "Te Wananga o Raukawa" (Whatarangi Winiata); "The Conduct of Educational Research" (John Keeves); "The Future of Educational Research Funding in the Context of Recent Reports on Social Science Research" (Marie Clay); and "Major Issues for Educational Research: Workshop Reports" (Myra Harpham, Cedric Croft, and Whatarangi Winiata). A list of seminar participants concludes the document. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED334094

EDUCATIONAL RESEARCH FOR THE FUTURE

The Challenges of the Next 15 Years

Papers Presented at the 1984 NZCER Invitational Seminar

Edited by David Philips

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

K. A. PICKENS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH

BEST COPY AVAILABLE

SO 021 190

EDUCATIONAL RESEARCH FOR THE FUTURE

The Challenges of the Next 15 Years

Papers presented at an Invitational Seminar organised
by staff of the New Zealand Council for Educational Research
to mark the 50th Jubilee of NZCER and the retirement of
John Watson (Director, 1968-1984)
held in Wellington, 14-15 June 1984.

Edited by David Philips

NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH
1986

New Zealand Council
for Educational Research
PO Box 3237, Wellington

© NZCER, 1986

ISBN 0-908567-62-6

CONTENTS

	Introduction	**David Philips**
1	Official Welcoming Address	**Hon M. L. Wellington**
5	Where Are We Going From 1984: Challenges to Educational Research	**Dr. Noeline Alcorn**
13	Plus Fifteen Equals 2000	**David McKenzie**
29	A Secondary School Principal's Views on Directions for Educational Research	**Turoa Royal**
31	A Primary School Principal's Views on Directions for Educational Research	**Wally Hirsh**
35	The Economy and Education	**Sir Frank Holmes**
47	The Individual and Education	**Professor Ivan Snook**
61	Society and Education	**Jack Shallcrass**
69	Te Wananga o Raukawa	**Professor Whatarangi Winiata**
77	The Conduct of Educational Research	**Dr John Keeves**
85	The Future of Educational Research Funding in the Context of Recent Reports on Social Science Research	**Professor Marie Clay**
97	Major Issues for Educational Research (Workshop Reports)	**Myra Harpham, Cedric Croft, Professor Whatarangi Winiata**
101	Participants	

INTRODUCTION

To celebrate the 50th Jubilee of the New Zealand Council for Educational Research and to mark the retirement of John Watson, till June 1984 Director of NZCER, an invitational seminar was organized by a small group of NZCER staff. This volume brings together the papers presented during the two-day seminar, as well as edited versions of the transcripts from the workshop sessions held on the second day. The original flavour of the presentations and the order in which they were given have been retained in order to provide an accurate record of the ideas expressed at the seminar. All participants have been sent a copy of these papers.

Held on June 14 and 15, 1984 the seminar had as its theme "Research in Education: The Challenges of the Next 15 Years". Given that John Watson was about to retire, and that a new Director would eventually take his place, such a theme was considered especially appropriate. Participants were able to reflect upon the achievements of NZCER over its first 50 years as a national research organisation, and also to cast ahead to the year 2000 to consider the most likely directions for educational research in New Zealand over the next 15 years.

The seminar was planned by a committee of staff (David Philips, Cedric Croft, Dr. Richard Benton and Dr. Geraldine McDonald), while David Philips was responsible for much of the organizational detail. Participants were invited from throughout New Zealand and represented a range of institutions, such as universities, teachers colleges, the Department of Education, the New Zealand Association for Research in Education, the New Zealand Planning Council, and the New Zealand Institute of Economic Research. Both Council and staff members of NZCER also took part. Altogether, with two guests from Australia, 55 educationalists attended the seminar. Financial assistance was provided by the McKenzie Education

Foundation, to bring an overseas speaker to the seminar, and NZCER.

The Honorable M. L. Wellington, at that time Minister of Education, gave the opening address. An introductory symposium followed, with contributions from Dr. Noeline Alcorn, David McKenzie, Turoa Royal and Wally Hirsh, which enabled the speakers to present their views on the major educational issues of 1984, likely changes to the year 2000 and the potential contributions of educational research to these changes. Three further papers were then presented: Sir Frank Holmes spoke on the economy and education, Professor Ivan Snook on the individual and education and Jack Shallcrass on society and education. In the evening Professor Whatarangi Winiata gave an account of Te Wananga o Raukawa.

On the second day, Dr. John Keeves (then Director of the Australian Council for Educational Research) discussed developments in the conduct of educational research, while Professor Marie Clay gave her views on the future funding and structure of educational research. All participants were then organized into workshop groups to comment upon what they considered to be the major issues in education requiring further research. The reporters' comments from these sessions were transcribed and have been included with these papers because of their relevance to the theme of the seminar. Only papers especially written for the seminar have been included, although important oral contributions were made also by George Parkyn, Ray Adams and Brian Easton, as well as a number of other participants.

The papers gathered together in this collection are a valuable source of educationists' views from the mid-1980s; whether the prognoses offered come to fruition is dependent upon the collective efforts of educational researchers in New Zealand. The 1984 Invitational Seminar was a unique opportunity for many of this country's leading educators to exchange ideas with a futuristic emphasis on the contribution of research to significant educational issues.

David Philips
Executive Secretary

OFFICIAL WELCOMING ADDRESS

Hon. M. L. Wellington

I welcome the opportunity to open this seminar and I congratulate its organisers on the subject they have chosen. It is very appropriate that NZCER, at the completion of its first 50 years, should be casting ahead rather than looking back.

But the whole business of foretelling the future is extremely hazardous, despite its popularity during the last decade or so. It often seems to me that what the British historian H. A. L. Fisher once gave as his definition of history can be applied with equal force to exercises in futurology. History, Fisher said, was "the play of the contingent and the unforeseen", and that is true of the future also. That does not mean that, because the future is unpredictable, we should try to identify the factors that seem to be influencing its future shape. But it does mean that every attempt to read the future is hypothetical. Only further experience of the unfolding future will tell whether the facts and inferences that are packaged in any given hypothesis will perform according to predictions made for them.

We all, of course, have our intuitions about the future. These tell us more about our own states of mind than about what might happen in the world outside our minds. People who are by nature optimistic have very different attitudes towards the future than those who are pessimistic. The doomsters warn us of cataclysms ahead unless we change our ways. The sanguine ones expect some miracle in the form of a technological breakthrough to solve problems which may at any given time in the present seem to be daunting.

In the same way, discussion about the future separates those who, on the one hand, are determinist and those who, with an implicit belief in free will, believe that men and women can indeed influence their futures.

Thus, some scenarios argue that the present is already too late for significant action to be taken to avoid disaster - the population explosion is out of control, and so on. The shape of the future, they say, was already determined some time in the past and we are now, in our continuing present, mere agents of some irreversible historical process. Others argue that the present is never too late, that the future is always being seeded in the present, and that we can indeed influence that future. Future studies are a litmus test for people living in the present. But if they do no more than confirm our predictions they have a very limited value. To be useful, they should help people to understand the sorts of choices that are available to be made, and the range of possible consequences.

Educational research obviously has a part to play in the identification of these choices. Just how big a part, however, is less clear. I have two main reasons for entering this note of reserve.

In the first place the issues that confront us and call for discussion are frequently not at all clearly defined. The definition of the real nature of an issue is often something that emerges only in the course of wide-ranging public debate. As one example, let me mention the current and quite proper concern about bicultural studies in school curricula.

That is a relatively recent formulation of the issue. It is a formulation that has grown out of a great deal of argument and effort that has been directed towards what, in the 60s and 70s, was referred to as problems of Maori education. So long, however, as the problems were defined primarily as problems for Maori students and their parents, the true nature of the issue was not being addressed. We are now beginning to realise that what used to be thought of as a Maori problem is in fact an issue for all New Zealanders. The idea of biculturalism is, by definition, something that affects members of the two cultures involved - Pakeha as well as Maori. That requires us all to make some transpositions in the way we state the issue, and examine its implications for action.

Now all this poses difficulties for research. Unless an issue can be stated reasonably clearly, it is difficult to know about what questions need to be answered and whether they are researchable. Getting the question right is a prerequisite for getting the research right.

My second note of reservation has to do with the well-known tension between decision-makers and researchers. The two groups tend to live in different worlds. Decision-makers, whether in the public or the private sector are invariably under great pressure to resolve issues, or determine some course of action - in short, to make policy and to make decisions. Frequently they must work to short deadlines. Naturally, they want to make good decisions, but they must often reach a decision against a background of fact and informed comment that is far from comprehensive. How often have you heard - as I certainly have - people say that what is needed is a decision - any decision, so long as it is a decision.

Researchers, on the other hand, are not usually decision-makers. They live in a different sort of world from decision-makers. At the risk of over-simplifying, their tasks are inquiry, the framing and testing of hypotheses, analysis, explanation, publication and the communication of their findings. They typically need time for these tasks - time to work out a proper design, time to field test their assumptions, time to collect and analyse their evidence, time to reflect on its meaning, and time to be as clear about what it does **not** say as about what it **does** say about any particular issue.

That is where the tension can come in. When a decision-maker looks to a researcher for help it is often because he or she has a problem that requires attention now. In a perfect world he would have preferred to have been in a position to make a decision yesterday - but he can wait until tomorrow, or the day after. There is a good chance that the researcher will tell him that he or she cannot possibly have a reliable research answer for a year, or two.

I am simply drawing attention to a tension that exists and which we all need to recognise, from whichever side we view the matter. It means, of course, that research can often be of much less help to Ministers of Education than is popularly believed. It is, I suggest, less with the formulation of policy and more with the practice of education that educational researchers should primarily be concerned. After all, it is in schools and other places where people learn that the real work of education takes place.

Indeed, we often hear it as a criticism that the actual business of learning is much less influenced by changes of policy at the national level than those who make those policies would like to believe. And when we turn our attention to practice, we have in this country an interesting

experience that offers some useful pointers to the future. We have, I believe, done better in this country than some others I could think of (Australia, USA, UK) in linking research to development activities.

The interplay between research, good practice, and development, followed by further research leading to better practice is well illustrated, for example, in the development of **Ready to Read** materials and reading recovery techniques. Professor Clay's active involvement in research, development and the practical application of her findings is now of fifteen years or more duration. As a researcher, she has contributed her particular insights and skills into a cooperative activity with teachers, reading advisers, departmental officers, and other researchers, and the result is better practice.

Through this research Professor Clay has helped teachers to answer questions which arise from practice but cannot be answered conclusively by further practice alone. She has settled issues that would otherwise remain a matter for argument, such as whether six years of age is too early to intervene with a reading recovery programme. In other cases research can identify more clearly what the issue is that is in dispute, and it may be able to produce evidence that bears on it. In short, then, research associated with development can help us all to be more clear-headed about what we know, helping us to distinguish what we know on the basis of attested evidence from what we hold on the basis of experience and informed opinion, and from what may still, for want of confirmation and refutation, remain in doubt or dispute.

I invite you to reflect on research of this type, and to do so in relation to the theme of your seminar, which is an exercise in fathoming the future. And I do so because, once you have identified what may well be some trends and options for the future, you still have to ask how researchers can best contribute to the analysis of those options and the advancement of the ones that might be supported in the public interest.

WHERE ARE WE GOING FROM 1984: CHALLENGES TO EDUCATIONAL RESEARCH

Dr. Noeline Alcorn

Tena koutou, tena koutou, tena koutou
Kua hui mai nei i tenei ra
Kia ora tatou

The topic for this symposium is an enormous and challenging one. To address it at all in fifteen minutes will require great self-control and ingenuity. I am conscious too, that my response to it is subjective and that all of you attending this seminar will have different responses, depending on your background, your place in the educational system, your philosophy and values, and disciplines you have studied. I need, therefore, at the outset, to declare my own position before proceeding with my analysis of the educational issues facing us now and for the rest of the century and my suggestions for lines of research which may help us cope with these issues. My background for the past 15 years has been in teacher education, as a lecturer and administrator; my interests have been focussed on language and literature and more recently in the theory and practice of administration. Both these fields have served to develop my conviction that complexity and ambiguity are the essential conditions in which educators have to live and work. I see diversity as positive and exciting but the task of educators and administrators as demanding a heroic attempt to embrace and understand conflicting perceptions and aspirations. I believe there are no easy answers or neat solutions.

I have identified eight educational issues to discuss this morning. I believe they must be dealt with if our educational system is to retain its legitimacy, the consent of those who are its clients.

1. Perpetuation of Inequality

The thirty-year period between the end of World War II and the mid 1970s was a period of expansion in all sectors of New Zealand education. For the first time in this country all children went on to some form of secondary education, the tertiary sector grew in size and autonomy, and coping with the demand for education preoccupied politicians and public servants. The sustaining rhetoric behind this expansion was Peter Fraser's often-quoted statement that every person had a right "to a free education of the kind for which he is best fitted and to the fullest extent of his powers", a statement reflecting a belief in egalitarianism and the capacity of education to help overcome social inequalities. By 1984, however, it has become obvious that our education system has not eliminated inequality, that many children leave school believing they are failures because they have not excelled in those fields of knowledge given most value and status by our national examination system. The economic downturn of the past decade has sharpened the perceptions of many teachers, students and parents that upward social mobility depends more on the state of the market than on education and that children whose home culture most closely resembles that of the school have an advantage that no amount of goodwill and remediation can overcome. Recent publicity and protest over differential pass rates for the School Certificate examination have focussed on the disproportionate numbers of children from low socio-economic and minority groups who score poorly or leave school without qualifications.

It is simplistic to blame either the students or their teachers en masse for this failure: we must seek for answers in an analysis of schooling which sets schools firmly in their political, social and economic milieux and ask questions about whose interests are being served by schooling, whose values are enshrined in curriculum planning, what control mechanisms are evident in school rituals and rhetoric, what personal qualities are recorded in schools. Rather than merely seeking for ways to perform more efficiently tasks which are already being done, educators must reflect critically on their practice and its rationale. The valuable work on knowledge and control, pioneered by Michael Young and developed by such writers as Bernstein, Bowles and Gintis, Bates and Apple, or the Macquarie University study **Making the Difference** (1982) provide theoretical perspectives to challenge some current New Zealand assumptions.

Such a critical analysis would help teachers and administrators trying to come to terms with the issue of inequality from blaming themselves as individuals and would help them see the system-wide pressures that need to be explored. I believe most teachers remain in the profession because they are committed to helping children or young adults develop and grow and that their greatest satisfactions are gained from feeling that their efforts have made a difference to individuals within their classes. Helping children achieve success in learning to read or master a new concept, especially if these children find learning difficult, is a priority. They find it hard, as Apple points out, to see beyond the amelioration and problem solving which assists individuals to get ahead to distinguish on a larger scale the patterns of the kinds of individual who get ahead and the latent outcomes of their institutions.

Unless the issues of inequalities in educational outcomes and the discrepancy between educational ideals and the results of schooling are subjected to a sustained critical analysis which leads to a new praxis, social divisions and social discontent will deepen and widen in the period up to the year 2000.

2. Preparing Students for an Uncertain Future

A second issue is that of preparing students for a future which is uncertain, a future in which increasing numbers are likely to face periods of unemployment, under-employment, and the need to develop new employment skills to cope with new jobs as old ones become obsolete. How different this situation is from the one which existed only twenty years ago is hard to grasp. Young people can no longer look forward to a steady job; their hard-won school qualifications are not a guarantee of employment; for those without formal qualifications the outlook is grimmer.

A report to the Club of Rome entitled **No Limits to Learning** claims that much conventional learning is **maintenance learning**, "the acquisition of fixed outlooks, methods and rules for dealing with known and recurring situations". In a time like the present, characterized by rapid change, turbulence or conflict such learning is inadequate. Educators should be concerned with **innovative learning**, the key elements of which are anticipation, the capacity to face new, possibly unprecedented situations, and participation, the capacity to become involved and participate in decision-making. We must ask ourselves as we look towards the end of the century what type of learning we encourage in our schools.

3. The Impact of Technological Change

A further issue which New Zealand education has been slow to acknowledge and come to terms with is the information revolution made possible by computer technology coupled with communications technology. Students now receive a great amount of their information electronically outside the classroom. The information revolution demands considerable changes in educational practice. It is no longer appropriate to measure what knowledge and information students can carry in their heads; rather they need to acquire skills of locating, evaluating and synthesizing information. To prevent a new elite controlling information for their own benefit or the exploitation of others, these skills will be as fundamental as elementary literacy. Technology also offers opportunities for the individualization of learning programmes or work tasks. Some future scenarios, influenced both by this and by dwindling supplies of fuel oil for transportation, speak of the electronic cottage. Education needs to find ways to develop social skills to offset this isolation and to guard against learning packages that induce the student to become "rule oriented", or dependent on making the "correct response".

4. The Challenge of Pluralism

Responding to the expectations of a pluralistic society is a further difficult issue for education. We cannot pretend that there is consensus about values, social aspirations, preferred lifestyles, curriculum issues, rights and demands of minority groups, or social controls. A variety of community groups seek to influence educational policy-makers: some seek recognition for new areas of study such as Maoritanga, or the revision of texts to include the perspective of women; others try to establish that certain subjects such as human development should either be kept out of schools or treated in clearly defined ways acceptable to them. There is pressure on the one hand to return to basics or strengthen the core curriculum, on the other to introduce bilingual teaching or abolish external examinations.

A pluralistic society not only generates debate or even conflict about the aims of education, teaching styles, curriculum content and discipline. It also generates demands for different forms of education to be legitimated. Parents may wish to educate their children at home or set up small alternative schools that reflect their own values. Increasingly, such groups are likely to want state funding and support for what they are doing. A development outside the official education system, for example, the mushrooming growth of Kohanga Reo forces changes

in the mainstream as its children enter schools. If the system does not adapt there will be increasing strains, rifts and alienation.

5. Educational Accountability to the Community

Pluralism exacerbates the tensions inherent in educational accountability to the community: accountability is made difficult if there is no easy consensus among those to whom schools must answer. Since the early 1970s there has also been a heightened awareness by many community groups of the desirability of greater parental and community involvement and participation in education and in 1984 the issue of where many educational decisions should be made is contested. How much community control should there be and how should it be exercised? How centralized should decision making be? What safeguards are there for pupils or teachers? How far do and should parental rights extend? What does teacher professionalism entail? Do pupils have rights to participate in decisions about their education? How much community involvement and consultation should there be about curriculum decisions, school hours, uniforms, educational trips and visits? These are all issues which must be analysed and resolved.

6. Changing Patterns of Enrolments in Education

Demands and pressures from groups who feel their needs are not being met by current structures and institutions are harder to accommodate in a time of economic cutback like the present with falling school rolls and teacher redundancies. Conflict becomes more obvious and open when groups compete for resources from a shrinking pile and the need for judgement and negotiation over priorities becomes acute. Currently available information suggests that rolls will continue to drop in primary and secondary schools until the end of the century. Cutbacks, smaller schools, an ageing teaching force and stable staffing will increasingly be the norm.

Education may not be all decline and retrenchment, however. By the year 2000 the age structure of our population will have changed: there will be fewer young people in schools, more older people approaching retirement. When we combine this with probable employment patterns it seems likely that a redistribution of educational resources may be necessary and desirable. There may, in fact, be more demand for post-secondary education of all kinds as people seek vocational training and retraining for new fields, develop interests through increased leisure, or are forced to acquire qualifications to gain or retain employment.

7. Women and Education

The issue of women and education was a major concern during the 1970s in New Zealand and has received official attention in conferences organised by the Department of Education, in the examination of sex role stereotyping in school texts and in the research study on teacher careers and promotion. Nevertheless, women are still vastly under-represented in higher administrative and policy-making positions and girls tend to be disadvantaged in certain curriculum areas. Teacher attitudes and classroom behaviours tend to focus attention on boys as is shown in recent British studies. More significantly, women are largely ignored in historical studies, women's writings tend to disappear and do not form part of mainstream history of ideas as is attested by Spender and others. Worse still, important research such as Kohlberg's work on moral development was carried out on an all-male sample and then used as the basis for a paradigm of moral development stages for human beings. Gilligan's more recent work has redressed the balance here but her work though endorsed by Kohlberg, has yet to be incorporated in materials for use in school. Researchers on human behaviour in the future must ensure that their sample is a representative one, not one which ignores as irrelevant half the human race.

8. The Selection and Training of Educators

The seven issues I have identified so far need to be faced by teachers and administrators working in their individual schools, colleges or institutes. To do so, they will need high levels of energy, judgement and skill for the work will demand constant interaction, negotiation and decision-making. It follows that their selection and training is of vital importance and may need re-thinking.

Questions that need to be addressed are fundamental ones:

- What personal qualities are important in those teaching young people in a time of rapid change and no easy answers?
- To what extent should the teaching force be representative of all groups in our society?
- How can initial pre-service training and later, continuing education help teachers and administrators reflect critically on their own practice, and ask fundamental questions about the nature of educational activities and organisations?
- Should administrators continue to be appointed without undergoing additional study and training to prepare themselves for the new role?

Possible Directions for Educational Research

So far I have attempted to raise broad issues and suggested that unless we find ways to answer some of the questions posed by these issues, then the directions taken by our society and the education systems embedded in it may take undesirable turns in which discontent and conflict could increase.

I have tried to emphasize the need for research which will ask fundamental questions about what education is for and who it is serving.

I have urged the need for careful and close analysis as well as description and cautioned against studies which investigate merely how to do better what we are already doing.

I have stressed the need to consider multiple perceptions of behaviours and interactions. I have indicated the discrepancies between teacher understanding and pupil understanding, or revealed differences in the way parents and teachers view the same events.

In turning to the contribution educational research might make to developments between now and the year 2000 I shall focus on process and style more than content. I should like to see an extension of the collaborative research which is already being done by NZCER in particular, for I believe it is important that research should come to be seen as an activity which is a normal part of school life engaged in by teachers, often in collaboration with pupils, parents and community members. This does not negate the enormous importance of research carried on by people highly trained in scholarly and scientific techniques who will continue to pursue their own studies and act as advisors to other groups. Participatory research and action research by teachers would provide a variety of small-scale studies of particular value to local schools and communities, and would encourage problem analysis, generation of innovation and close monitoring and evaluation of action. It would provide an invaluable base for school development projects and would generate a spirit of enquiry and an awareness of research which could help in the dissemination of findings from major studies. It would help overcome some of the resistance to research findings as being "all right in theory but no use to the classroom teachers" which is often found in overworked and overstressed staffrooms. Data from such studies could also be available to those whose major research interests lie in wider analysis and synthesis.

I shall conclude by suggesting three areas for investigation which from my perspective within the teacher education field seem of particular importance.

The first bears on the divisions in our education system between the pre-school, primary, intermediate and secondary sectors and the training of teachers for these different sectors. Although we give lip-service to the theory that learning and teaching are activities which remain essentially the same regardless of the age of the students, we select and train teachers separately. We assume that each service requires different techniques, different knowledge, different qualities in those who apply. Is this really so?

I believe we should question the divisions and that we might begin by examining critically all the transitions between different levels of schooling as they are perceived by parents, teachers and students, investigating their expectations, their aims, and their actual experiences, setting current practice in historical perspective, taking into account developmental theories, examining outside pressures and constraints on schools.

We need also much more investigation of the transition from teacher to administrator in our system and much more careful analysis of what school principals do and what they perceive their role to be. I am not suggesting any sort of crude neo-Taylorian time analysis but a detailed, critical examination of what administrative behaviour is and should be. Only then are we in any position to design programmes for would-be administrators which teach more than hints of efficiency and/or control.

Our most crucial task, however, relates to the issue with which I began this paper. If, as educators, we are concerned about the discrepancy now obvious in our system between our aims to widen opportunities and options and seek to maximize potential and achievement, and the reproduction of social inequalities evident in our current ranking of students into those who succeed in the common academic curriculum and those who fail, then we need more and serious study and analysis of why and how this is happening and the designing of alternatives which are broader, more co-operative and which do not regard education as a commodity to be acquired or consumed but as an activity which helps human beings to achieve some autonomy over their own existence and to learn to co-operate with each other to achieve common goals.

FIFTY PLUS FIFTEEN EQUALS 2000

David McKenzie

My task in the short time available to me is to identify what I judge to be the major issues facing education in 1984, to consider the most likely changes that might occur between now and the year 2000, and to assess the contribution that educational research might make to meeting the demands of these likely changes. In short, I have been asked to play the role of "futurist"; i.e., a pursuit in which I must proceed without the benefit of wisdom gained from hindsight which is the strongest weapon in the historian's bag of tricks. Upon reflection, however, the task which I have been given, although daunting, is not quite as perilous as it might first appear to be. Since none of us can live the future at this moment, we are perforce required to guess likely emergent challenges on the basis of what we analyse to be significant about our present circumstances and how we have arrived at the point we are at. Accordingly, my judgements about our educational future are based upon what I regard as being significant about our educational past and present, while my views about that awesome phenomenon called "research" are heavily weighted on this occasion by my assessment of what the NZCER has achieved in its first fifty years of life. But having said all of that, I must also concede the humiliating possibility that any or all of my predictions might turn out to be comically wrong should they be read back in the year 2000. G.K. Chesterton once uttered a timely warning about this sort of thing. He wrote, "The players listen very carefully and respectfully to all that the clever men have to say about what is to happen in the next generation. The players then wait until all the clever men are dead, and nicely buried. Then they go and do something else".[1] Nowadays, such is the pace of things, I doubt whether the players would wait for the soothsayers to die.

Of all the changes that have occurred in our educational practice and thinking in the past fifty years, what strikes me as being of supreme importance is the decline which has taken place in the puritanical spirit with which we once approached the schooling of the young. Elsie Locke, in her biography **Student at the Gates**[2] writes, "The social and educational climate of our time did not aim to build our self-knowledge and esteem... The puritan ethic which prevailed was more likely to put us down for fear we would become precocious and conceited". What she identifies here is the cost in human terms of a philosophy which had much to offer a pioneering community dedicated to work and a practical product of the energies of one's labours. Today, many of our writers (e.g., Maurice Shadbolt)[3] have discovered that the strengths and weaknesses of New Zealand's puritanical tradition which evoked so readily the phrase "the battle of life", are a fertile source for the novelist to mine. Just what this ethos has meant, and still means for the educationalist, is beautifully described for me in Rex Fairburn's poem 'La Belle Dame Sans Merci'. In the poem, an unfortunate railway traveller from Auckland to Wellington in what Fairburn calls "that hovel on wheels, the second class smoker", finds himself verbally assaulted by a female fellow passenger who is furious that the government of the day has seen fit to commute the death sentence of a convicted murderer:

> Doncher reckon they oughter put him on the end of a string
> the murdering bastard doncher reckon and let him swing
> I'd like to do the job
> with me own hands the slob
> and by God if they'd let me so I would
> I'd fix his lordship I'd fix him good
> and proper and let him rot
> but they haven't got
> the guts to slip a noose
> round his dirty ears
> hell in twenty years
> he'll be running around again loose
> and none of us
> safe at night he'll have the run of us
> just because of a few fools in Wellington.[4]

It's all there in Fairburn's poem. The puritanical trait in New Zealand life can be identified by, among other things, a determination to reduce complexities in living to fixed rules, to think few new thoughts, and to punish deviance. Over it all, too, there hangs the whiff of repressed sexuality. This is a trait in our society which reacts

hysterically when terms like "playway" are used in connection with schooling. For the puritanical ethos, "play" is the antithesis of work. Work is what you do when you are engaged in trying to win the "battle of life". "Play" is "not-work". Therefore it is essentially a waste of time, and it is probably sinful as well. It is an ethos which has had extraordinary difficulty in coming to terms with Caldwell Cook's credo that "...the only work worth doing is really play; for by play I mean doing anything with one's heart in it".[5]

I have said that the puritanical emphasis in our schooling practices has been declining. But it has by no means vanished. And indeed it has made some show of revival in these recent years which have been marked by social and economic anxiety. The abiding strength of puritanism in New Zealand education has been, as I have remarked elsewhere,[6] that for significant numbers in preceding generations, it has worked. From cowshed to profession has been the New Zealand version of the log cabin to White House saga. Furthermore, for those persons who have apparently failed to use their schooling opportunities to their own advantage in the "battle of life", puritanism has a ready answer. "It's your own fault. You've failed through weaknesses in your character". Over the years, societies have commonly found compulsory schooling to be a convenient way of lowering the self-expectations of many pupils, while that same schooling has also been used to frighten others into pressurised achievement. Thus it is not surprising to discover from the research literature that young unemployed persons commonly blame themselves for their failure to find a job. This is what they have been taught to believe. The sad thing is that it is as fallacious as is the reciprocal claim that if all young people left school with reasonable qualifications there would be no significant youth unemployment.[7]

But for all its apparent revivalistic energy at the present time, I expect puritanism (even in its secular clothes) to decline further as a force in New Zealand education in the next fifteen years. Puritanism can survive only as long as it works. And I do not think it has much mileage left. In particular, I think that technology and New Zealand's place in the trading world are going to force us to revise our thinking about work and the relationship of education to work; I think also that if we really begin to take multiculturalism seriously we are going to have to assess our traditional individualistic work ethic in the light of other views; and finally I think that as modes of cheap travel increase, there will be far less likelihood of outdated ideas surviving in New Zealand as dominant precepts for action. In the short run it is possible that we will have to learn the hard way that traditional attitudes no longer

work. A likely outcome of this will unfortunately be the piling up of paper qualifications for jobs which require only a modicum of skill. The worldwide phenomenon of credential inflation, which is ably described by R. M. Dore in his book **The Diploma Disease,**[8] can be predicted to encourage poor quality education and group frustration. It is not an outcome which we will be able to endure for any length of time. Accordingly, I believe that we will be forced to rethink our educational assumptions whether or not we prefer to do so.

Time permits me to expand on several of these points only briefly. As part of the global village, we in New Zealand are destined to come more closely to appreciate the prediction by Jenkins and Sherman that, "Unemployment, which has been synonymous with slumps and low investment will, for the next few decades, be equally the product of high investment and booms".[9] The governments of the day will be in no doubt that the British Advisory Council for Applied Research and Development is correct when it argues that micro-electronic engineering is the most significant technology of the 20th century. And they will seek to avoid the nightmare conjured up by Arnold Toynbee. Toynbee warns,

> If we do not take care, the destiny of the great majority of this planet's doubled or trebled population might be to live unemployed in shanty-towns, subsisting on an inadequate dole which would be given grudgingly by the productive minority, who would themselves be living in fear of being massacred by the resentful unemployed majority.[10]

Thoughtful comment from all shades of political opinion in the western world on the future of work, seems to concur that we will be forced ere long to re-examine the traditional puritan virtues we have associated with work.[11] This is a view which is being reinforced by practical comment as the inroad of automative technology into service sector employment becomes clearer to the New Zealand community.[12] Over it all, lies the challenging question posed by Robert Heilbroner. "If it is now true that machines are going to displace more and more people who do service jobs, the question is: Where will they go?"[13] I have no doubt that this is the key question of our time. I also have no doubt that it is a question which is not to be confused with a depression in the trading cycle.

The implications of these momentous developments for the schools have hardly yet begun to enter our consciousness. Schools, as Hayes and Nutman aver, are places where most children learn that "...occupational advancement is synonymous with social advancement".[14] And it is not surprising to me that recent Australian evidence has indicated that the

most work-anxious age group in that society is the late teenage cohort.[15] But if the New Zealand Planning Council is any guide, we have a long way to go before we can say that we have started to measure up to the fast growing reality that confronts young people. Writing in 1980, the Council conceded that traditional definitions of full employment were no longer appropriate, but it believed that if schools were to offer a vocational education option for the relatively small numbers at risk in making the transition from school to work, all would be well.[16] From the standpoint of four years down the track, this recommendation is already being revealed as inadequate. By 1990, although the immediate bulge in the cohort entering the workforce will have passed, I predict with some confidence that it is a recommendation that will be seen to be ludicrously inept for the conditions then prevailing. What the advice will by that time be seen to amount to, is an exhortation for most pupils to compete for qualifications for entry to jobs which in many cases require declining skills;[17] and a sidetracking of the few (?) non-academic pupils into vocational training which will probably lead to no jobs at all. Whether or not our general economy is in an improved state of health, the puritanical ethos which has been fighting a rearguard action in our education system will by then finally have collapsed, and we will be required at last really to face up to the challenge of providing a generous education for all persons. If it is at all true in New Zealand, as a British critic has claimed of his country, that the lower echelons of the school system have been concerned with the churning out of "factory fodder" so that only the instilling of a routine and discipline comes across,[18] our education system will have to adapt to the new circumstances that are going to prevail.

How is this to be done? Conventional remedies which suggest that educationists should now invest their energies in providing new suits of clothes in the shape of leisure skills, social skills, recreation skills, and so on, seem to me to be dangerously misguided. All of these imply docile pupils whom we fit and shape for the new world which we know awaits. But we do not know what the shape of that new world will be at all. To pretend that we do, is to involve ourselves as educationists in a lie. What we do know, however, is that people develop as people when they encounter their world in ways that enable them to realise their unique talents through the process of inquiry, activity, and attainment. It is this fact which must constitute the essence of our conception of a generous education for all persons. Our goal, as educationists, should be to preside over a population which leaves formal schooling with a high morale; a population which does not believe that life is given to us

ready-made; and a population which in the words of Ortega Y. Gasset, views life as being "what we are constantly and continuously making ourselves".[19] This, above all else, is the contribution which educationists can best make to the world of the future.[20]

Techniques, especially those which exploit the fruits of modern technology, will play an increasingly important part in the classrooms of the nation in the years ahead. Teachers will need to learn to be not afraid of technology and the techniques required to use well-designed instructional material. But the major temptation for us all to avoid is the placebo belief that packaged learning and computerised techniques will from now on do the job of educating for us. This will never happen if we are properly committed to providing education for all. The essential point is that education is a process of inquiry which requires interaction among people; in particular among the teacher and the taught. Paulo Freire captures the matter nicely when he argues that education must involve a genuine dialogue between teacher and taught so that what emerges is "a synthesis between the educator's maximally systematised knowing and the learner's minimally systematised knowing".[21] Notice why Freire uses the term "knowing" rather than the word "knowledge". He wants his reader to understand that the process of education must be open-ended for both the teacher and the taught if schooling is not to degenerate into an elaborate process of domestication which rewards the passivity of its clients. The implications of this thesis for the future of educational research seem to me to be profound.

Like many others I suspect, I have found that reading about research, as opposed to doing it, can be a confusing and even demoralising pastime. Most general books about educational research[22] are essentially footnotes to Humpty Dumpty's argument to Alice. "When I use a word", Humpty Dumpty said in a rather scornful tone, "it means just what I choose it to mean - neither more nor less". Needless to say, we have lots of Humpty Dumptys in educational research. All of them indeed have the right to stake their claim. But none has the right to expect his or her claim to be uncontested. And as we look toward the future, our major problem, as I see it, will be to determine the basis upon which we will seek to award priorities in resources and encouragement for research endeavour. My answer to that challenge is this. If it is the case that a generous education must be a process that is predicated upon open-ended inquiry learning in a human context, then it must follow that the highest priority should be awarded to research which enables teachers to facilitate that process. This means that the value of such research would be seen to lie in the quality of teaching and learning experienced,

rather than in a concrete measurable product such as improved GNP. It means also that some kinds of research now argued in Humpty Dumpty fashion to be crucial, will turn out to be surprisingly limited in value. And finally, it means that practitioners in some kinds of research are going to have to be much more alert to the danger that the effect of their work might be to reduce the role of the teacher to that of a rule-governed technician, and the role of the learner to that of a passive recipient.[23]

In recent years it has become clear that governments which supply the bulk of the money tagged for educational research have become more determined that the research should fulfil requirements which seem appropriate to the governments concerned. In 1970, Mrs Thatcher, then Minister of Education in the United Kingdom, signalled the new directive mood. She argued that the research policy of the DES had to move from being one of passive support for ideas which essentially were other people's, to one of initiation by the DES on problems of its own choosing; problems which would by definition offer the real possibility of yielding usable research conclusions.[24] A similar view was presented to the OECD in 1982 by the Hon. Mr. Wellington. Mr. Wellington concluded that the research conducted by agencies outside the Department was "neither substantial in volume, nor addressed to the real problems that Government faced".[25] Personally, I have every sympathy with the desire of politicians and administrators to have access to well-researched information that is relevant to decisions to be made.[26] And while I support the rebuttal of Mr. Wellington's definition of research by the OECD Examiners, I have the nasty feeling that the research community has brought this sort of thing on itself by its indiscriminate past claims concerning the returns to be made upon investment in educational research.[27] At all events, my somewhat foolhardy prediction perhaps, is that the kind of research goals which are being spoken about here, will not rate as the highest priority in the years to come.[28] The future development of quality schooling lies in the charge of teachers and school communities. Politicians and admin strators will play an important but secondary role.

It is noteworthy that when educationists are nowadays attacked for providing research which is too academic (i.e., useless), the human tendency is to respond by quoting a significant research piece which is widely agreed to be "useful". Thus in the OECD Review Professor Marie Clay's work is quoted as being the most worthwhile kind of educational research to have emerged from the New Zealand universities in the past

twenty years. I am happy to endorse the intrinsic merit of Clay's work as well as its value for the classroom practitioner. But I think that the implied Humpty Dumpty definition of research which is being entered in this context, must be seen for what it is. Moreover, there is no question to my mind that the literature clearly reveals that the empirical model of research, if uncritically accepted without any reference to its limitations, can lead to outcomes which are inimical to the process of open-ended inquiry learning.[29] In 1984, the claims in the literature for empiricism are less strident than they have been in the past,[30] and I predict that in the future, the quality of all kinds of research will rise as practitioners become more sensitive to the limitations of their particular modes of inquiry.[31]

The highest priority in the future should, in my view, be awarded to the kinds of research which assist the classroom teacher not just as an active initiator of learning events but also as a reflective individual who assesses the changing world in which inquiry learning and activity is taking place. This does mean that we are going to have to give attention to the teaching task and to the role which we expect "research" to play in that task.[32] And it also means that we are going to have to review the role of an organisation like NZCER to see how it might form a bridge between the world of research and the local environment of the teacher over the next fifteen years. I have no doubt that with its past achievements, its current services, and the existence of its regional institutes, the NZCER does have the potential to rise to the challenge.[33] But everything depends upon our understanding of what we expect research to achieve, and even more importantly upon the degree of our commitment to teaching as a research-oriented profession.[34]

As it broaches the next fifty years, the NZCER can take some comfort from the fact that it has a proud record of achievement upon which to build. Its catholic publishing policy has been a particular strength,[35] and I wish to conclude by briefly referring to another of its little-known resources. In 1934, the founding Director of NZCER, Dr. C. E. Beeby, formulated the initial policy statement of the Council.[36] In my opinion it is a remarkable document, being in most respects as relevant in 1984 as it was in its own time. What Beeby called attention to, was the need for specialist researchers to address themselves to problems that were of the widest concern to all engaged in education.[37] But being a young and wise man (a rare combination indeed), Beeby did not forget that the attitude of the consumer was just as important as the diligence of those who were engaged in active research. He wrote, "...research, in

the last analysis, is an attitude of mind, an attitude that regards no problems as finally solved, no methods as finally fixed, and no goals as finally known".[38] Well said, Dr. Beeby. Yours is a statement which still "sets the field" in 1984, and if we are really prepared to embrace all that it implies, it is a statement which will take us satisfyingly to the year 2000 and beyond.

FOOTNOTES

1. Gershung, J. **After Industrial Society.** London: McMillan, 1978, p.1.
2. Locke, E. **Student at the Gates.** Christchurch: Whitcoulls, 1978, p.24.
3. Shadbolt, M. **Strangers and Journeys.** London: Hodder and Stoughton, 1972.
4. Curnow, A. **A Book of New Zealand Verse.** Christchurch: Caxton Press, 1951, pp. 99-100.
5. Cook, C. H. **The Play Way.** London: Heinemann, 1917, p.19
6. McKenzie, D. **Education and Jobs: 1984.** Dunedin: NZCE, 1983.
7. Critics who are in any doubt about this might care to reflect upon the following data from the National Urban League's Report 'The State of Black America, 1984'. The black high school completion rate has risen from 23% in 1950 to 79% in 1978. But in December 1983, the black unemployment rate was 17.8% (white 8.1%) and was the highest it had been since 1948. The percentage of black males unemployed 18-19 years of age was 42.7%. These are official figures and are therefore almost certainly **understating** the true position. (**The Guardian**, 29 January, 1984.)
8. Dore, R. **The Diploma Disease.** London: Unwin Books, 1976.
9. Jenkins, C. and Sherman, B. **The Collapse of Work.** London: Methuen, 1979, p.ii.
10. Toynbee, A. **Surviving the Future.** London: OUP, 1971, p.94.
11. e.g., Best, F. **The Future of Work.** New Jersey: Prentice-Hall, 1973.
    Anthony, P.D. **The Ideology of Work.** London: Tavistock, 1977.
    Edwards, R. **Contested Terrain.** London: Heinemann, 1979.
    Davis, P. **N.Z. Labour Perspectives.** Auckland: Ross, 1981.
12. e.g., Comment from the Executive-Director of the New Zealand Insurance Council, 1980. "We are just starting to shed jobs as a result of improved technology...Most of the effect will be felt in unskilled and semi-skilled female employment especially...Inflation will reinforce the trend towards replacement of staff by technology." (Davis, p.76.) Comment by Mr. D. Hitchcock, Auckland Business Consultant, to the New Zealand Retailers' Federation Conference. "Retailers are effectively automating their operations, replacing people with machines. Why do you think we have got nearly 10% unemployed? Despite what the politicians tell you, I can assure you it's not going to change - the jobs are just not there any more." (**Otago Daily Times**, 8 March, 1984.)
13. Best, p. 57.
14. Hayes, J., Nutman, P. **Understanding the Unemployed.** London: Tavistock, 1981, p.4.
15. Williams, C. 'The work ethic.' **Australia New Zealand Journal of Sociology**, v.19, n.2, July 1983.
16. N.Z. Planning Council, **Towards an Active Employment Policy.** Wellington: Government Printer, 1980, p.7.
17. If any person is in doubt about the deskilling which can come to jobs with the advance of technology, ask any experienced officer in banking what has happened to the requirements of many jobs in banking in recent years. To put the point another way, the reader can reflect upon a recent claim from the New Zealand Vice-Chancellors' Committee that the value of a university degree in opening up

employment possibilities "is likely to increase in the future rather than diminish". According to the Committee, "Almost without exception employers place communication skills high on their list of essential qualities when seeking recruits, and these skills are required across the whole range of occupational possibilities". What the Committee does **not** say is that the increasing **complexity** of most available jobs **requires** advanced educational qualifications for work entry. Had the Committee claimed this, they would have been proclaiming a lie. (**Otago Daily Times**, 27 April, 1984.)

18. Jenkins and Sherman, p. 145.

19. Gasset, O.Y. **Mission of the University.** New York: W. W. Norton, 1966, p.17.

20. The negative effect which our meritocratic education has for "underachievers" is well described by Daniel Fader who, on the basis of his experience of teaching in black schools in Washington, D.C., writes "Children who do not easily take the imprint of their teacher's own education and values, who are not ductile enough to be drawn wire-thin so that they may slip through traditional holes in the fabric of society - these are not 'promising children' and the best that can be hoped from them is good behaviour (silence) and early withdrawal (drop-out). Since silence is their most positive attribute, they should be left unmolested during the class hour so long as they practice that virtue."
Fader, D. **The Naked Children.** New York: McMillan, 1971, p.12.

21. Freire, P. **Cultural Action for Freedom.** Harmondsworth: Penguin, 1977, p.36.

22. e.g., Cohen, L., and Manion, L. **Research Methods in Education.** London: Croom Helm, 1980; Good, C. **Essentials of Educational Research.** New York: Appleton-Century-Crofts, 1966; Fuchs, G. **Evaluating Educational Research.** Washington: University Press of America, 1980; Nisbet, J., and Entwistle, N. **Educational Research Methods.** London: Unibooks, 1970; Thouless, R. **Map of Educational Research.** London: NFER, 1969; Taylor, W. **Research Perspectives in Education.** London: RKP, 1973; Cronbach, L., and Suppes, P. **Research for Tomorrow's Schools.** New York: McMillan, 1969; Nisbet, J., and Broadfoot, P. **The Impact of Research on Policy and Practice in Education.** Aberdeen: Aberdeen University Press, 1980. (This is the best contemporary commentary on educational research that I have seen. It also demonstrates how far Nisbet has widened his perspective over the past decade.)

23. Michael Apple uses this point to argue his radical critique. He writes, "The growth of behaviour modification techniques and classroom management strategies and their incorporation within both curricular material and teachers' repertoires, signifies...[that] as teachers lose control of the curricular and pedagogic skills to large publishing houses, these skills are replaced by techniques for better controlling students." (Apple, M. 'Controlling the work of teachers'. **Delta**, 32, August 1983, p.11.) **Lee Cronbach**, writing on techniques of evaluation, alludes to the same general point, but does so in a careful way. He writes, "The designer plans on the basis of some conception of what an excellent evaluation is or does. Some writers seem to judge a design in isolation, applying standards of form. I apply a standard of function; I favour whatever design promises to increase the social benefit from the evaluation. Discussion of design alternatives rests, then, on a view of how evaluations can influence social affairs." (1978). (Quoted in Cirincione-Coles, K. **The Future of Education: Policy Issues and Challenges.** London: Sage Publications, 1981, p.125.) What is at

issue here is the limitation of positivism. R. H. Thouless expresses the strong faith of positivism when he writes, "When...the final goal of experimental research has been reached and a solution to a controversial problem has been obtained, there is no further room for argument on that problem. Opinion will have been replaced with knowledge." (Thouless, p.5.) But it is noteworthy that the "great names" of early 20th century educational theory were well aware of the dangers of such reductionism as they saw them. William James cautioned that "psychology is a science, and teaching is an art" (Cronbach and Suppes, p.46), and John Dewey emphasized that education must always be viewed as a person-related process. He argued, "The sources of educational science are any portions of ascertained knowledge that enter into the heart, head and hands of educators, and which by entering in, render the performance of the educational function more enlightened, more humane, more truly educational than it was before."

24. Taylor, pp. 19-20. The corollary to this thesis is the claim that most current educational research is disappointing, when it is not entirely useless. In 1976, the Permanent Secretary of the DES was reported as saying: "I have to say, of course, that the great thing about research is that part of it is rubbish and another part...leads nowhere and is really indifferent." (Nisbet and Broadfoot, p.1.)

25. **Reviews of National Policies for Education: New Zealand.** Paris: OECD, 1983, p.118. Mr. Wellington's particular criticism of the current state of educational research in New Zealand is that it is excessively academic, narrow, inconclusive and tentative. He also believes that researchers are out of step with social and economic realities and that the policy research being conducted, for example, by NZCER is not addressing itself to real policy issues. (p.119.)

26. McKenzie, D. 'The politics of non-planning'. Clark, M. (Ed.), **The Politics of Education in New Zealand.** Wellington: NZCER, 1981, pp. 27-42.

27. The themes which drove research optimism for many years were those expounded by E. L. Thorndyke in 1910. He said, "A complete science of psychology would tell every change in human nature, would tell the result which every educational force - every act of every person that changed any other or the agent himself - would have. It would aid us to use human beings for the world's welfare with the same surety of result that we now have when we use falling bodies or chemical elements. In proportion as we get such a science we shall become masters of our own souls as we now are masters of heat and light." (Quoted, Taylor, p. 12.) Nisbet and Broadfoot on looking back at past claims on the returns of investment in educational research, believe that positivism of the kind espoused by Thorndyke led people to be falsely optimistic about what research could achieve. They write, "[Upon] the largely unstated assumption that the social world was amenable to systematic and objective scientific analysis - though fraught with greater difficulties than natural science - was based the equally taken for granted notion that in time it would be possible to generate systematic generalizations about the educational process which would be the basis for a steady improvement in the educational enterprise. As a corollary to this assumption, it was tacitly assumed that policy makers and practitioners would welcome such information and make rational decisions accordingly." (Nisbet and Broadfoot, p. 55.) It is also an unlikely prospect that policymakers ever would, or could, wait for research to supply their decisions for them. The claim that, "The aim of policy is often to resolve controversies with 'minimum pain'

rather than with logic, to reconcile divergent views rather than to reach an elegant decision", seems to me to be a more accurate description of what is typically required in the creation of policy. (Nisbet and Broadfoot, p. 22.)

28. This is not say that such things as resource planning are of no value. Indeed, I see no reason at all why organisations like NZCER should not be engaged, in part, on commissioned policy-oriented research. My argument is concerned with priorities, and I claim that our priorities must be first awarded to the work of those who do the teaching and learning.

29. McKenzie, D. 'Why universal teaching method must fail to educate'. Paper read to ANZHES Conference, Brisbane, 1981.

30. Time and space do not permit extended argument on this all-important point. However, some major points for reflection are these. R. H. Thouless, himself an empiricist, points out the problem of applying the "crucial test" or the "decisive experiment" in educational research. He writes, "Results are crucial or decisive only in the existing situation, with this kind of antecedent experience, with teachers having this kind of training and these kinds of attitudes. Systems change, teachers change, pupils and parents change, as society changes. Results of experiments now may be misleading or even irrelevant ten years hence." (Thouless, p.5.) A more fundamental critique of positivistic studies of human behaviour is found in this comment from Cohen and Manion: "It (positivism) fails to take account of man's unique ability to interpret his experiences and represent them to himself. Man can, and does, construct theories about himself and his world; moreover, he acts upon these theories...Social science, unlike natural science, stands in a subject-subject relation to its 'field of study', not a subject-object relation; it deals with a pre-interpreted world in which the meanings developed by active subjects actually enter into the actual constitution or production of that world." (Cohen and Manion, p.5.) Myrdal criticises naive Baconian empiricism in social science research. Stressing the importance of valuations, he writes, "Facts do not organize themselves into concepts and theories just by being looked at; indeed, except within the framework of concepts and theories, there are no significant facts but only chaos." Myrdal, G. **Objectivity in Social Research.** London: Duckworth, 1970, p.9.) The gap between expectation and what a particular research can provide is a tension which comes through in the argument of many commentators. Writing in 1966, B. Bloom asked, "What has been accomplished over the past 25 years by our educational research?...We tend to veer from over-optimism about educational research, to almost complete despair and pessimism...The case for educational research has yet to be established." (Nisbet and Broadfoot, p.15.)

31. At all events, we must hope that the outcome of some kinds of "reading" research for example, will not result in education being reduced to the following kind of instructional technique : "A program is a series of tasks to be taught. To insure that what is intended gets delivered, daily lessons are designed in script form, showing the teacher what to do and say. This feature makes it possible, where necessary, to implement effective instruction using aides as teachers after only one or two weeks of preservice training...We are concerned with designing **disseminable** (sic) procedures for improving instruction. Scripts permit the use of **explicitly pretested** (sic) examples and sequences. The teacher knows that if the student has the prerequisite skills, the teaching sequence will work. The teacher does not have to spend time trying

out various possible illustrations, choosing appropriate language and analysing possible teaching sequences." (Baker, W., Engelmann, S., Carmine, D. 'Direct instruction technology', pp. 12-13. Lecture series, Macquarie University, 1979.) Whatever the immediate practical justification of this "Technology", the dangers of generalising the exemplar of the teacher as technician and the pupil as passive recipient, should be obvious.

32. Comment is legion concerning the communication gap between published research and practising teachers. It seems to be a worldwide problem. We do need to look closely at the time commitments we presently require of teachers. But more especially perhaps, we need to review the way in which we introduce new teachers to the idea of research as opposed to making them familiar with some research terminology. The following comment from Nisbet and Broadfoot is well worth reflection. They write, "Often teachers are simply too busy to attend to research and innovation. They are trained by college staff who are part of the same practice rather than research-oriented tradition, and who are themselves often too busy to keep up with research." (p.50) But if university teachers think that they are exempt from these failings, they would do well to heed the warning of Professor Philip Lawrence, University of Canterbury. Lawrence argues, "We sometimes speak as though a research training is something tacked on the 'content' of the subject. We should, however, ask ourselves whether there is much justification for any university course which is not at the same time giving the student a training in the use of the skills of analysis, investigation and evaluation whether these be historical, philosophical, or psychological." (Lawrence, P. 'The knowledge of causes and the secret motions of things.' Wellington: NZARE, 1980, p.9.)

33. As with its older counterpart in Australia (ACER), it does not seem that to date the NZCER regional institutes have developed as powerfully as they might have done. Yet, because the regional institutes are close to the field, and because they offer individuals an opportunity to reach beyond "role-specific knowledge" (Taylor, p.194), the NZCER could be judged to contain much potential for future development. The alternative of the NZCER becoming to all intents and purposes a Wellington quango, seems to me to be a depressing option. My guess would be that the Australian situation is not strictly comparable. (Connell, W. **The Australian Council for Educational Research, 1930-1980.** Victoria: ACER, 1980, p.56.)

34. This would have to be a commitment not only in the provision of teaching time for research-oriented activity, but also an administrative commitment in terms of expectations that teachers will be increasingly research-oriented in their work. It would also follow that that commitment requires a more generous funding of agencies like NZCER. The present resources are inadequate for the NZCER to embark upon substantial new work as far as I can judge.

35. But a word of warning. The early generation of NZCER publications literally created a New Zealand literature in education. It was indeed a catholic literature. In recent years, because of costs, the impetus has not been maintained. Modern scholarship is more specialised and more sophisticated but it has not perpetuated the same catholic appeal. In a small country, people who write, as well as those who use scholarship, need to have a critical literature which is essentially theirs. The generation which provided our initial literature has gone. What are we going to provide between 1984 and 2000? The response might be that other sources are now available to provide the literature. But I think it is a fair question to pose.

36. Beeby, C. 'Research in education'. **National Education**, Feb., 1935, pp. 6-8. On rare occasions, policy statements are produced which go so essentially to the heart of the matter that they live beyond their time. This is one of them. As an historian, I would judge this short piece to be one of the most important documents in our educational history.

37. Beeby included such questions as: (1) What motivates choice of career course at school? (2) How and why does our examination system change from its original intended function? (3) When New Zealand imports educational ideas and practices from abroad how and why does it change them to fit things comfortably into a New Zealand context? We have at last started to do sustained research on (1). We are now (fifty years late) beginning to research (2). I doubt whether comparative educationists have yet got on top of (3). A somewhat depressing report card for the past 50 years. As for the relationship between education and the world of work (an issue which Beeby also raises), we do not seem to be that far advanced in our understanding anywhere in the world. According to Glennester and Hoyle (1973) "we simply do not know how changes in the labour market effect the demand for different kinds of further education...how long the time lag between them is, or how sensitive". (Taylor, p.226.)

38. Beeby, p. 8.

A SECONDARY SCHOOL PRINCIPAL'S VIEWS

T. K. Royal

Tena koutou - E nga reo, e nga mana, e nga Karangatanga maha haere mai ki tenei pito o te motu. Tena koutou nga uri o ratou ma kua wehea atu ki te po. No reira tena ano koutou.

My suggestions have an historical perspective as well as a cultural input. While other speakers have highlighted similar areas of research, I wish to restate these research topics to emphasize their importance.

1. **Achieving Equality.** One of the basic and crucial concerns on which researchers might well spend their time more fruitfully is in the field of achieving equalising opportunity, and yet the gap appears not to be diminishing. We need more information from research which would help us to piece together and unravel the difficulties that face us in the drive towards equality of achievement.
2. **Multicultural Education.** We can no longer continue to educate our pupils along monocultural lines within the framework of a multicultural society. It is inappropriate, unacceptable and a possible danger to the development of reasonable attitudes conducive towards good race relations. In addition, we are limited in that there is nc generally accepted theory or definition of multicultural education.
3. **The Bicultural Imperative.** I suggest that one way to begin to research multicultural education is to develop a framework for bicultural education. This is not to suggest a lowering in importance of multicultural education, but it is to suggest that it may well be the best method to achieve the aims of multicultural education.

4. **Styles of Learning.** Our type of learning in the classroom is predominantly analytical, theoretical, book-focussed, classroom dominated and teacher centred. It seems to me worth the time to research whether this type of learning is appropriate to all pupils and whether some pupils are penalised unnecessarily because of the restrictions in the styles of learning adopted in most classrooms.

5. **Alternative Groupings in Secondary Schools.** We group pupils either on the basis of mixed ability or on some type of banding system. Using the syndicate system of the primary school, it may well pay secondary schools to explore further groups in such a way that schools within schools are formed to cater for the varying needs of individuals. The whanau system is only one example of alternative groupings in schools. However, one can devise whanau groups which have different objectives. One group of pupils for which secondary schools should be planning is the arrival of the Te Kohanga Reo pupils into secondary schools. Immediate research should be launched into an organisational framework that might assist secondary schools to cater for the varying needs of individuals and groups within school.

6. **School Climates.** Coupled with the above should be the continuation of the search for an optimum type of school climate. For far too many children formal education can be the worst experience they have had in their lives.

7. **Formal Examinations.** I wish to expose again my prejudice by suggesting that the public exams have a more damaging effect on self-image and life chances than any other school experience for a high proportion of our young. I know of no other training programme which lasts so long (from the age of 5 to 15 years) at the end of which there is a high risk of failure caused partly by a built-in scaling system. They deserve better.

8. **Lifelong Education.** In a far less secure world, where the rate of change seems to be the only constant, the search for a system whereby people can opt in and out at varying ages seems to be an area that might, if explored further, overcome the difficulties resulting from the ever-changing circumstances of society.

A PRIMARY SCHOOL PRINCIPAL'S VIEWS

Wally Hirsh

Thank you for the invitation to contribute to this important seminar. I feel it is an honour to be associated with this conference to farewell John Watson, who has done so much in his leadership of this Council, and to be associated with NZCER, which has done so much for teachers out there in the forefront of education.

Let us never forget that in the end the most important things that happen in education are those which occur in classrooms when teachers and children interact. I am vitally concerned at the quality of that interaction and the influences on teachers, both direct and indirect, which may contribute to the improved effectiveness of that interaction.

In preparing for this seminar and realising that I had some 15 minutes to address the issues, I came up against a personal conflict; in fact, more than one conflict: firstly, my own desire to make some points which I hold to keenly, and secondly, to face the dilemma of whether to pick on a couple of issues and examine them in some depth and, in so doing, scan the literature or to take the liberty of calling upon my feelings about the numerous issues I am concerned about. I have chosen the latter course.

How do schools become more effective? How do they use their valuable autonomy to meet the needs of their own intake (and we all know how much that varies)? I wish I had time to illustrate that from my own recent experience as Principal of Karori West Normal School and of Mt. Cook, New Zealand's most multicultural school. How do we switch more children on to a love of lifelong learning? How do we grant all children that inalienable right to enjoy the feelings of self-pride and success in what they choose to do? How do we at **least** make schools places where children care to be and where they can at least fail safely?

To do these things I recognise some important issues that we must address ourselves to over the next 15 years as we head ever so rapidly towards the year 2000. I do not need to examine the social and economic conditions in which we find ourselves in New Zealand and in the world. The social and economic climate affects our teachers, our schools and people's expectations of its schools; it affects curriculum planners, politicians and a whole array of decision-makers and pressure groups.

The Issues in Education: Towards 2000

1. **Equality of educational opportunity or the perpetuation of inequality**

   We can turn back to Peter Fraser whose rhetoric was the sustaining force behind the great educational expansion in the 30 years from World War Two until the 1970s. He said "every person has a right to a free education of the kind for which he is best fitted and to the fullest extent of his powers" reflecting in this statement a belief in egalitarianism and the capacity of education to help overcome social inequalities. By 1984 we have not succeeded. Many children leave our education system believing that they are failures because they have not excelled or even remotely succeeded in those fields of knowledge given most status and value in our national education system. Recent revelations about the School Certificate examination have given cause for further alarm. Some subjects are lower-rated; differential pass rates reinforce these ratings. Clearly children from lower socio-economic groups and minority groups are scoring poorly and leaving school without qualifications. Unless teachers, administrators and society come to grips with these issues of inequality social divisions and discontent will deepen and widen in the period up to the year 2000.

2. **The impact of technological change**

   The information revolution is now upon us but we have yet to come to grips with it in our education system. We should no longer be concerned with what knowledge children can carry in their heads but rather with the skills they have in locating, evaluating, processing and synthesizing information.

3. **Preparation for change, an uncertain future**

   There is only one thing certain about the future and that is that it will change; the rate of change is increasing rapidly. Children have to look forward to periods of unemployment or under-employment, and there is a need to develop new (employment) skills to cope with new jobs, as old ones become obsolete. How different this is from only 20 years ago. Hard won school qualifications are not a guarantee of employment. So education must help prepare youth for

increased leisure and other likely social changes. This means society, established society, must learn to value other activities. The old work ethic (as if work were the most holy and fulfilling thing to do) must give way to the acceptance of other life-styles and forms. A young person wishing to work is not helped by believing that society regards him or her as a useless layabout.

4. **Multiculturalism**

Ours is a multicultural society. There is a Maori renaissance taking place. Forty years ago Maori children were beaten in our schools for speaking their language, while today they and their pakeha classmates are being taught the language. Bilingual education has begun here in our district and in other parts of New Zealand. We must work to develop a society which values cultural diversity. It is a topic in our curriculum but the level of ignorance in our society about other people is alarmingly high. The centres of prejudice are numerous and assimilationist theories are still upheld by many. I really lament often at the ignorance and intolerance which prevails in our society, and if time allowed me to be anecdotal I could illustrate these claims most vividly.

5. **Curriculum development**

It is time for a review of the curriculum, and there is a need for a new emphasis. Some new topics which may acquire a new importance are: education for leisure, further training opportunities, the creative arts, interpersonal relationships, second languages (e.g., Japanese, Chinese, Russian, Maori), computer studies, Maoritanga, coping with change, healthy living (e.g., diet, drugs, alcohol, cigarettes, fitness, management of time).

6. **Lifelong learning**

The rate of knowledge growth is so great that we will need and want to keep on learning. Change is so dramatic that we will need to keep on learning. Our society will need to develop further a network of learning centres, all creating lifelong learning opportunities. Perhaps a system of entitlement will have to be developed.

7. **Management of educational institutions**

An area of concern for leaders in education to be concerned with is staff management, i.e., maximising staff potential, promoting professionalism, motivation, job performance/energy/inspiration, job knowledge and skills (including on-the-job training and staff development) and professional burnout.

8. **Learning theory**

There is a renewed need to look at how people learn and what strategies are required to maximise learning. Is competition useful? Teachers, as initiators of learning events and assessors of learning in a changing world in which inquiry, learning and activity take place, need to develop schools where it is safe to make mistakes.

9. **Alternatives: catering for individual differences**

Within schools and between schools we are not all the same. The release of every individual's potential must be our goal. Clearly the same setting is not appropriate for all. Different learning environments suit different people.

We must provide a generous education for all. We do not know what the shape of the new world will be. That it will be different is certain. To proclaim that we know what the nature of this change will be in the year 2000 is to indulge in fantasy and to involve ourselves in a lie. What we do know, however, is that people develop best when they encounter their world in ways that enable them to realise their unique talents through the process of inquiry, activity (of all sorts) and successful attainment.

The Council has contributed greatly to educational research in New Zealand and to the improvement of schools in this country. There is much more to be done in all nine of the issues that I have touched upon. I wish the Council well as it continues to contribute to the quality of education in New Zealand.

THE ECONOMY AND EDUCATION

Sir Frank Holmes

Introduction

I welcome the opportunity to be part of this seminar, and especially to make a contribution to an occasion designed to honour John Watson as he retires from his long period of service to the Council. Our association goes back a long way - to our educational roots in Otago. The association was close in the 1960s and 1970s while I was a member, and for four years Chairman, of the Council, and he was the Director. I am glad to be able to join in thanking him for what he has done for the organisation and to wish him and Mary well for the future.

I am asked to speak about the economy and education over the next 15 years. In speaking about the future environment in which decisions about education will have to be made, it is almost impossible to separate out factors which people think of as "economic" from factors which are thought of as demographic or political or technological or social. Let me therefore select some changes which are likely to occur in the "environment" broadly defined which I believe will be very significant both for the economy and for education, and will make reappraisal of past approaches inescapable.

The Changing Environment

(a) **Demographic**

An absolute decline is occurring in the numbers of people under 15. By 1990, the rolls of primary and intermediate schools will probably have dropped by 20% below the high point of 1975. The wave will affect the rolls of other educational institutions, too. But the numbers of over-60s are growing. The ratio of dependents to workers, overall, will keep falling for a time, but there will be structural problems for the economy and for education arising from our reduced propensity to have children

and our increased propensity to live longer. Issues arising from an ageing population will become more significant as we move into next century.

(b) **Economic**

Internationally, we have been passing through "turbulent times" by comparison with the first 25 years after the war. The imbalances which emerged with the oil shocks of the 1970s, have led to instability in the world financial system, about which our Prime Minister has been rightly expressing concern. Governments everywhere have found it much more difficult than in the past to bring inflation under control without serious adverse effects on output, employment and, of course, world trade. Growing unemployment has been increasing pressures for a resurgence of the protectionism which did so much damage in the 1930s.

It is no new thing for the world to go through a longish period of contraction after a long period of prosperity. A go-go period has often run out of steam, because the technological developments upon which the expansion was originally founded have been widely exploited, the profits of enterprise have become compressed or the willingness of existing business organisations to take risks in new investment has diminished. These rather depressed periods have, however, always been succeeded by an expansionary phase, when sufficient enterprise and flexibility have been restored through competition to convert some new technologies into growth industries.

I argued in 1982 that the new information technologies, along with the application of other knowledge which we have gained in the post-war period, should provide a good basis for such a resurgence as the 1980s go on. The U.S.A. has been recovering strongly and others are now following. The key question is for how long and at what pace expansion will continue. While the depressing influence of debt burdens, unstable currencies, protectionism and the anti-inflationary policies of the major powers are still being felt, there are some more positive and encouraging signs.

While no one can forecast with confidence what will happen in the world, I believe that fluctuations around a moderate expansionary trend are more likely than continued contractions in the rest of the 1980s. As in the past, there will be significant changes in the relative wealth and income of different countries. Most observers seem to see the likelihood of a continuing shift of economic power during the next expansion phase from Europe to growth poles in the Pacific Basin. This happens to be the area in which we are geographically located and with which we, with Australia, will inexorably become more closely involved in the rest of

this century.

Internally, the New Zealand economy has not been particularly productive by comparison with others for some time. The problems of poor productivity were aggravated by the two oil crises, agricultural protectionism in the European Community and elsewhere and other developments which drove up import prices at a pace much faster than our export prices grew. Despite substantial overseas borrowing, we have found it harder than in the past to satisfy people's expectations, whether for better personal living standards or for public services and benefits. Politicians and pressure groups have had reluctantly to accept that substantial changes in the structure of our economy are inescapable if we are to do better in future. More emphasis will have to be placed on the efficiency with which we use the resources with which we have been so fortunately endowed.

If this is to happen, there must be less emphasis in policy on protecting the status quo, e.g., by import licensing, by transport regulation or by acceptance of inefficiencies in the public services. Our industries and services will be more exposed to international competition, and will have to pay more attention to meeting the needs of customers on competitive terms in a diverse range of markets. Management and workers will have to widen their perspectives in order to understand the requirements of people from many different cultures. The emphasis in policy will move away from protection towards helping our best enterprises to improve their capacity to compete. Joint efforts by Government and the private sector in marketing and promotion, education and training, research and development will be important elements of the required strategy for development.

There is a tendency by some to see economists as people preoccupied with the production of material goods. In fact, we would expect the tendency to continue for a higher proportion of output and employment to come in services, and for output to become more knowledge-intensive. Entrepreneurial capacity, useful knowledge, abilities to educate, entertain and otherwise satisfy the growing demand for services, are likely to be relatively more scarce among the factors required in the changing economic structure than physical labour or capital. These changes, together with developments in information and communication technology, and continuing changes in the role of women, will bring about profound changes in what is required of management and workers. Learning to adapt to these and other changes will be an important element of most people's lives.

(c) **Political**

The economic changes have been an important influence in changing political attitudes, especially in relation to Government expenditure. Frustrated personal expectations, and the desire to curb pressures for higher pay, have led to increased emphasis on the desirability of reducing income tax. Government has been reluctant to substitute taxes on commodities for the income taxes, and has been under considerable pressure to increase expenditure in other directions - servicing growing debt, benefits for the unemployed, participation in big projects, especially in the energy field, or to honour past commitments, notably the very expensive national superannuation scheme for all over 60. Deficits between revenue and expenditure have been permitted to widen on average during the decade, to a point now where it is vital that they be reduced appreciably over the next few years. The Government's development strategy acknowledges this, and states that the emphasis in reducing the deficit will be placed on curbing the growth of public expenditure. Public expenditure on education in the next few years will have to be considered against this background, whatever party is in office. There are difficult choices to be made between raising taxes and curbing expenditure, between provision for the old and provision for the young, between education and other types of expenditure which will be important elements of political debate in the 1980s.

(d) **Social**

The economic changes also have important social implications which affect education. The most obvious is the increase in unemployment, and displacement of workers by technological and structural change and their likely persistence at higher levels than we experienced in the past, even if we succeed in accelerating our rate of economic growth. The impact is felt particularly by the young, the inexperienced and people from minority groups, with consequent aggravation of personal social and racial tensions. The changes raise critical issues, present but not dominant ten years ago, about the role of education and training in effecting needed improvements.

The Role of Education

In looking to the future, I do not think that I would wish to change greatly what my colleagues and I on ACEP had to say about aims and general principles when we wrote about Directions for Educational Development after the Educational Development Conference.

Like Peter Fraser, we considered that "education is not enough if it teaches us how to make a living. Education must teach us how to live." In the past, education had been too narrowly conceived, and its purposes too limited. It should help individuals of all ages to gain worthwhile knowledge and skills of all kinds - not just academic learning, but also greater understanding, including self-understanding, through various cultural pursuits, greater competence for both vocational and non-vocational ends, greater pleasure through meeting worthwhile interests, manual, artistic, technical or intellectual.

I noted down some principles which seemed to be widely accepted in the discussions, and which seem to me to be still valid as basic principles to guide policy.

The education system must aim to ensure a sense of achievement for all at school and to provide there the basis for continued learning and achievement for all throughout life. To this end, schools must be put in a position to offer a more diverse and flexible curriculum designed to enable different learners to develop their different talents. Such a curriculum would continue to extend those with academic talent and recognise that intellectual and verbal skills are important for all. However, it would also provide better for those whose strengths lie in other human endowments needed for work and life. Moreover, since work is only part of life, preparation for work should be seen as only part of the purpose of education.

Giving equal opportunity to all requires special treatment for some. If we wish to achieve more fully the goal of equal educational opportunity for all New Zealanders, we shall have to make further progress in helping those whose physical, cultural, economic or social backgrounds place them at a disadvantage in making use of educational opportunities offered to them. Giving everyone access to institutions of roughly equivalent standard throughout the country is not enough to produce a system which most regard as equitable.

Education should be a lifelong process. It must be increasingly recognised not merely as a preparation for life, but as an essential, continuing element in sustaining our capacity to work effectively, to respond with confidence to inevitable changes, and to live with satisfaction and purpose in the community.

Education must be seen as more than schooling. It can and should be provided and obtained in many ways as well as by formal teaching in institutions. Effective action to improve education thus requires more

than measures to improve the quality of schools and other educational agencies. Although such measures are of central importance, we must also develop other means of education and foster far more effective co-operation, in providing and utilising opportunities to learn, among educational institutions, families and the community.

Issues of Continuing Concern

Despite the efforts which have been made in the past decade, most of the issues which the EDC suggested were of strategic concern in education in the mid-70s remain the fundamental issues which must be addressed in the next 5 years. The higher unemployment which characterises the society of the 1980s has enhanced, not diminished, the importance of these issues. The unemployment throws up new challenges for those concerned with education and training. There is the challenge of helping those who are unemployed to cope with their idleness and to prepare themselves to obtain satisfactory employment. There is the more general challenge of preparing people to make the most of periods out of employment, whether these are involuntary or as one hopes arise from increasing opportunities for leisure which should be available as the economy becomes more productive. There is the further challenge also of how to integrate policies for support of the unemployed, assistance to the unemployed in finding jobs, job creation and other aspects of employment policy with required improvements to our education and training systems. I regard it as of fundamental importance to find satisfactory alternatives to enforced idleness for both young and old. Government alone cannot, and should not be expected to find all the answers to the problems of unemployment, education and training.

Let me go through some of the "areas of concern", as ACEP put it, to which I hope those concerned with educational policy and educational research will give special attention in the next few years.

a) **Early Detection of and Action on Difficulties**

The EDC emphasised the importance of strengthening the capacity of pre-school institutions and primary schools to co-operate with others in diagnosing and dealing with children's difficulties early. These difficulties may stem from a variety of causes: exceptional talent, cultural differences, domestic circumstances, bad health and so on. Educators can help in the diagnosis and in the prescription of an appropriate treatment. They cannot solve the problems on their own. Co-operation is needed with parents, health and social workers, and others.

Extra expenditure, staffing and reduced pressure of numbers have enabled more children to attend a pre-school facility at an earlier age and stay longer than before. The Government has been providing more help for areas with special needs. Likewise staffing and other improvements both generally and by extra provision in selected primary schools have increased the capacity of those schools to deal with some aspects of the problems involved, notably with reading recovery. However, there is still much to be done.

Unfortunately, in education as in health, while people agree in principle that priority should be given to a preventive approach and to co-operative community action to deal with special difficulties, the changes to the new approach occur very slowly, if at all, when overall expenditure is being constrained. There is a tendency for managers and staff to be preoccupied with sustaining their existing activities and their existing positions.

b) **More Co-operation between Schools and Their Communities**

ACEP felt that great efforts should be made to ensure realistic parent and community involvement in education, beginning with the early childhood years. Perhaps we underestimated the resistance which exists to more wide-ranging co-operation between teachers, parents and others. It is not easy to get agreement to or to organise supplementation of the professional efforts of teachers by tapping other knowledge, experience and resources available in the community.

What Dr. Beeby has described as "the selfishness and isolation of conventional education", though less than it was, remains one of the obstacles to more effective use of resources. Another is apathy, shyness or lack of interest by parents and others in the community who could help. These obstacles vary in intensity from one school to another. Much good work is going on to break them down. New approaches by the Departments of Maori Affairs and Education and others, starting from the Tu Tangata programme and represented by programmes such as the community education initiative scheme and Te Kohanga Reo are important steps in the right direction. I hope they will be further developed and that further research will be done into ways of strengthening co-operation between schools and their communities.

c) **The "Turned-Off" Minority**

ACEP considered that, although educational opportunity is available to all, many fail to take advantage of it for a variety of reasons. There must be a massive attack on this problem.

It must include special attention to the needs of underachievers, socially or physically handicapped children, those who are not motivated by existing curriculum and teaching methods, members of minority cultures, the brilliant but uninterested, and the geographically isolated.

Essential steps in ensuring that educational opportunities are used to their fullest include making schools more exciting places, freeing the secondary school curriculum from the constraints of external examinations, and placing greater emphasis on support and ancillary staff. Opening schools to their communities, work experience opportunities, and the continuing education of teachers, are all stressed.

The "in" book on business management at the moment is one called **In Search of Excellence.** That book puts considerable emphasis on the importance of making people feel that they are succeeding if you are to achieve better productivity in the workplace. The same applies in education.

In fact, considerable efforts have been made in most secondary schools to improve the situation. But considerable problems still remain. The recent OECD report, quoting the Department of Education, emphasised that the present secondary curriculum, and the means available for its assessment, are still very much geared to academic accomplishment by the most able quartile of the age cohort. Professor Karmel's committee felt that more than this was needed if all those attending secondary school were to be taught in ways appropriate to their abilities, if they are to be motivated towards success and if they were to obtain from schooling a sense of accomplishment and worth that would sustain them in the new forms of post-secondary study and employment which they would face.

The problems of the "turned-off" minority arise from several causes. The solutions must be sought in homes and in the community as well as in the schools. But I trust that those concerned with educational policy and research will give special attention to four questions which seem to demand reform. Firstly, what changes should be made in the secondary school curriculum which will continue to foster the development of those endowed with high intellectual ability, whose skills will be badly needed in many aspects of New Zealand's development, but will provide better programmes that build on other talents - manual, artistic, technical and so on. Our changing economy will need these talents. Many of those who possess them will not proceed to university but find their future education and training in other institutions, on the job, or in other ways.

The curriculum must also aim to relate the work which is done at school more closely with work and life in the community. In particular, the programmes in the curriculum must be designed to give more students a sense of achievement and of joy in learning.

The second question is what can we do to improve approaches to teaching and learning? I am a Fellow of the Royal Society of Arts. That Society's council and journal are presently emphasising the need for "education for capability". By this is meant emphasis on "doing, making, organising and the creative arts" and "the competence to undertake and complete tasks and cope with life, both individually and in co-operation with others", as well as emphasis on the analysis and the acquisition of knowledge which tends to dominate current educational programmes.

We also need to give much more attention to improving our present methods of assessment, in the direction of "mastery learning". In other words, we must still test the capacity of students (and their teachers?) and encourage improvement, but our methods should not start from the assumption that continued failure for many is a necessary outcome of the educational process. The aim should be to ensure that all can achieve better mastery of whatever it is they are trying to learn.

This leads to a further question: how to reduce the influence of examinations which are designed to test people's competence for University Entrance on the courses which are taken by the great majority of pupils who will not aspire to that type of education. These pupils must not only obtain a good basis for their future work and life but also for the continuing education and training which most of them will need if they are to cope with changing job requirements and other adjustments which they will have to make during their lives. In this respect I quote that conclusion of the OECD committee's review of New Zealand's educational policies:

> Despite the lack of agreement on a precise solution...one thing seems clear to us: the U.E. prescription should be removed from the Sixth Form. Whether it should be transferred to the Seventh Form or disappear altogether; whether admission to the University from the Sixth Form should continue; what should be the nature of the new Sixth Form examinations articulated to a wider curriculum are matters to be determined in the light of New Zealand conditions. But in the examiners' view, they are matters deserving urgent consideration.

School staffing requirements must be affected by changes in the curriculum. Again, however, we find that change is difficult at a time when there is considerable financial restraint and when staffs are static or declining. Can the problems be adequately met by the retraining of

existing staff, who are mainly qualified for the more academically-oriented curriculum of the past? How serious as obstacles are entrenched personnel practices and trade union objections to the infusion of staff who are less academically qualified but more capable of assisting with other aspects of the new curriculum? How far can we and should we tap skills available elsewhere in the community or in the correspondence and technical institutions to supplement the skills of the existing staffs of schools?

One of the most important issues of all is what more needs to be done to assist those from minority cultures, with the co-operation of parents and their communities, develop a greater sense of identity and of achievement in learning, building on the strengths of their own culture, but equipping themselves to live and work in a mainly Pakeha community.

d) **Mobility of Staffing**

The mobility of staff was an issue mentioned in ACEP's report on Directions for Educational Development. It has been made more important as the staffing of educational institutions has become more static. Many reports on educational issues have noted the need for staff in different educational institutions to avoid the tendency to operate in compartments. There is also a need to facilitate greater movement of staff among schools, teachers' colleges, and the Department of Education and other educational institutions. The need becomes greater when opportunities for promotion and the infusion of new blood in institutions diminish. Special efforts are then needed to maintain efficiency and vitality.

To improve the position one needs to look among other things at how to reduce the obstacles presented by existing salary structures, whether the possibilities of transfer on secondment or extended leave without pay could be improved and what we might do to enhance opportunities for able young people to gain entry or promotion by increasing the options for some older people to retire early on superannuation.

e) **An Open System of Tertiary and Continuing Education**

In summing up their views on educational policy for the 80s, the New Zealand Planning Council argued that if we are to put New Zealand on a path of sustained economic, social and cultural development, we need a major effort to upgrade the skills of management and of a labour force which will continue to grow quite rapidly. Necessary changes in the structure of the economy will add to the pressures already coming from technological development which require us to place more emphasis than in the past on retraining and continuing education, both vocational and

non-vocational. It was for this reason that both ACEP and the Planning Council suggested that high priority should be given to developing a more broadly-based, flexible and open system of continuing education. This system should provide, among other things, better information and guidance for potential learners and greater efforts to identify and meet their needs.

This view has been strongly endorsed by the recent report of the recent OECD committee under the Chairmanship of Professor Peter Karmel. The Planning Council recommended that particular importance be attached to the following:

(i) Flexible attitudes to entry requirements, especially for those who have elected to defer further education;

(ii) The provision of bridging courses to equip older and less qualified students;

(iii) Generosity by institutions in giving credit for work done elsewhere;

(iv) Resistance to the upgrading of educational requirements for entry to particular occupations where there is no clear justification;

(v) Co-operation among institutions in an endeavour to avoid unnecessary duplication of costly courses;

(vi) Recognition of the value and importance of self-directed, vocational and community learning activities outside the formal educational institutions, and of services rendered by private enterprises;

(vii) The development of an effective system of information for learners through libraries, museums, art galleries and other public facilities, and through the media, utilising recent developments in computer and communications technology where benefits justify the costs;

(viii) Improved guidance for learners on the various facilities available.

To that I would add the need to review the present system of assistance to learners after the period of compulsory education, a suggestion made by ACEP which has not been followed up and the need to improve the links in communication between the institutions providing tertiary education and the communities which they serve. For example, there seems to be a considerable lack of knowledge of the facilities which are available through the Technical Correspondence Institute to assist on the job training or training in other institutions.

Conclusion

There are several other issues which I would like to have discussed, for example, the extent to which authority and responsibility for the formulation of educational policies and of curricula is centralised in

New Zealand and the possibilities of greater delegation and devolution of responsibility in our educational system. However, the time has come when I should round off these remarks in order to leave time for discussion.

In the National Development Strategy which the Government released in 1983 - which I admit appears to have sunk without trace - the Government stated that "it is difficult in a world of rapid economic, social and technical change to over-emphasize the importance of an efficient and flexible system of lifelong education and training, which helps people to respond to the changes which affect their lives and their work" and "it (the Government) accepts responsibility for financing most of the provision of the institutional foundations for this education and training."

The strategy indicates an awareness of the issues that I have raised and an intention to move along the general lines which I suggested in many, but not all, of the policies I have discussed.

However, the strategy emphasizes the financial and economic constraints which exist which could impede movement towards our educational goals as rapid as we would like. It emphasizes the need for efficiency in educational institutions. It adopts the OECD theme of moving from a Welfare State to a Welfare Society in order to suggest that education, like health, is not a matter for the Government and for educational institutions alone.

Consequently, in the 1980s, we are likely to continue to have a vigorous debate on where the boundaries for Government support of education lie, and how best to achieve educational aims which are fairly widely agreed. In our report on Directions for Educational Development my colleagues and I on ACEP set great store by educational research and evaluation of options in education. The report of Professor Karmel's committee makes rather disturbing reading in this respect, particularly its reporting of the comments made by the Minister of Education on how little assistance he personally feels he has obtained in economic policy from the research which has been done outside his own Department. Some of the examiners suggested that he might have unrealistic expectations of how far educational research can be directly applied to policy issues.

I personally believe that organisations such as NZCER and other people engaged in educational research can do a great deal to provide a better basis of information and analysis to evaluate the options for educational development. I thank John Watson for the contribution which he has personally made to educational reseach and policy in New Zealand and overseas, and I look forward to a further strengthening of the work of NZCER during the rest of this century.

THE INDIVIDUAL AND EDUCATION

Ivan Snook

It would be tempting to try to give advice about how to undertake research on individual human beings - to look back at the past for lessons and forward to the future for those modern devices known in the trade as "guidelines".

On this model, I would remind you that in the past, much educational research has been about groups and there has been the celebrated problem of how to relate findings to this individual. I would point to Allport's well-known distinction between **nomothetic** research which seeks principles and laws characterising all human beings and **ideographic** research which seeks to delineate unique individual characteristics.

I would go on to mention areas where in recent years research on individuals has been successful. There is, for example, the highly successful, though still controversial applications of behavioural modification techniques. In these the focus is on the individual. She is her own control: a baseline period determines the incidence of the behaviour to be controlled; periods of reinforcement and non-reinforcement follow and if the incidence of the desired behaviour improves and the improvement is sustained, the treatment of that individual is declared to have been successful.

A second example could be the Q-sort technique in which the individual sorts cards into categories which then provide her, or a counsellor, with information about her salient characteristics. A third variant is the Kelly personal construct theory: elements are examined three at a time and the individual decides how two of them are alike and the third is different. A grid is constructed and by statistical procedures meaning can be abstracted for the individual.

A final example could be the use of the clinical interview in which the educational or psychological researcher models herself on the doctor or the therapist and in a one-to-one situation investigates the thinking patterns, or problem solving strategies of the individual person. Ethnographic research which has recently become so popular depends to a considerable extent on the belief that close personal engagement with people can provide valid data on individuals. These, of course, are often then elaborated into a set of statements about groups, but nevertheless the data-gathering is to a significant degree focussed on the individual.

These kinds of things, then, I could have done. But I would not have done them all that well and I am aware that there are dozens of people - many of them here today - who could have done them better.

So, I asked myself why the organizers had invited me, rather than someone else, to give this paper on the individual. Ignoring the less flattering answers - such as that it is cheaper to get someone from Massey than from Auckland or that the other nineteen people who were asked declined - I concluded that the organisers hoped that as an educational philosopher I might stand back a little from the research scene and comment on it. As all of you know, philosophers are quite skilled at standing back. Indeed, some of us stand so far back that no-one can hear what we say. Sometimes, we are so far back that we cannot even be seen let alone heard.

Be that as it may, a certain intellectual detachment from the hurly-burly has always been regarded as a philosophical virtue and, for better or for worse, I have decided to adopt this approach this afternoon. Before you grow too restive, however, I hasten to assure you that I shall restrict conceptual points to a minimum, use abstractions sparingly, quote Plato only when really required, and use Latin or Greek expressions with restraint. And so - to the topic of the individual and her place in educational research.

The way we have talked in education about the individual, the group, the society, has I think mislead us into dichotomous thinking. We are interested in individuals or in groups, in concrete people or idealized categories, in changing personal attitudes or in reforming social structures. This dichotomy has affected research as much as anything else so that researchers sometimes think themselves irreconcilably divided about the very aim or point of their endeavours.

The intellectual and philosophical background to this is instructive. In the Anglo-Saxon culture, we have inherited the empiricist tradition about knowledge. In this tradition, there is a

clear distinction between me, the knower, and the object, the thing to be known. Facts are states of affairs out there and do not depend on me - they are facts whether I, or anyone else for that matter, know them or not. As a modern philosopher puts it so felicitously: "The expression 'the grass is green' is true, if and only if, the grass is green." Facts, then, are states of affairs and the data gained by researchers is, or can be, objective, i.e., can reasonably accurately capture the facts out there. It follows that there is a gap, even a gulf between facts and values and between knowledge and its use. We can discover, for example, that lower socio-economic children score less well on I.Q. tests than those from higher socio-economic groups without either approving or disapproving of this state of affairs. We can show that Maori school achievement is lower than that of the pakeha: the policy work has then to be done. Confronted with the facts, planners can accept this state of affairs as proper, regard it as "not important" or try actively to change it. Researchers, then, cannot see either of these examples as problems. A "problem" is an evaluative term. (A person's weak heart is a problem only if a long or active life is a good; reading disability is a problem only if people should be able to read; and so on.) The researcher can present these not as problems but only as facts. Others can, if they wish, evaluate these states of affairs as undesirable and if their view is authoritative, researchers can (objectively) search for "solutions", that is, procedures likely to alter the states of affairs.

Just as evaluation is independent of fact-gathering, so theory is distinct from data-gathering. The researcher first gathers objective data (the facts). When she has sufficient data she tries to make sense of it - to identify laws or principles and to construct hypotheses which can then be tested against "the facts". In time we have a body of theory which, while resting on the data, is logically distinct from it. Further data can confirm or disconfirm the theory; in the latter case the theory will have to be modified to account for the data.

The final feature of the empiricist tradition is that in social research the individual person being studied is like the individual lemming (those furry creatures which the layman believes commit "suicide" in droves) or the individual piece of igneous rock, i.e., is simply an objective passive instance of the group - "the lemming", "igneous rock", etc. The researcher, on the other hand, is quite different. Like the person studied she is also an individual but, unlike the person studied, she is not just an instance of human being. She is an active individual human person who because of her training and methodology can be

objective. Thus, the empiricist position comes full circle. There is a firm distinction between the knower and what is known. In research on humans the knower is an autonomous, trained, skilled, person whose human subjectivity has been schooled into a stance of scientific objectivity. The person studied, however, is viewed as an object, an instance of some objective category ("lower socio-economic group", "the poor reader", etc).

The legacy of this tradition is all around us. It manifests itself in the indignation and incredulity of researchers who are charged with "smuggling in values" or "supporting the status quo". They are more indignant still when condemned for the political use of their work even as they proclaim that, as researchers, they cannot be held responsible for the way their work is used by others. Like the work of those who make knives, their work is neutral - they cannot be responsible for those who slash car tyres or stab their mates in a brawl. In similar vein, Jensen argues that he is in no way responsible for the racist policies others have tried to erect on his research findings. The findings are facts; their interpretation and their use is quite another matter.

This, then, roughly speaking (very roughly speaking, in fact) is the tradition we - university researchers, NZCER researchers - have inherited and in so far as they are interested at all, the public have accepted it too. There are "facts" and "values", "information" and "interpretation", "data" and "theory". The distinction, it is argued, must be carefully preserved.

There is, however, another perspective stemming from Descartes and Kant, and shaping the Continental tradition as the empiricist model has shaped that of the British. In this tradition there is no rigid dichotomy between the person knowing and the object known. The knower, just as much as the known, is part of a world not a removed commentator on it. The world is not a given. There is something there - the noumena as Kant put it - real all right but not knowable by human perception. What can be known are the phenomena, the appearances, but these can be known only by a human observer who is herself in part phenomena. Thus, there is no gap: the basic reality is **our** reality, the world as perceived by and interpreted by us. Knowledge is the result of partly subjective humans in touch with their partly subjective world. Objectivity, in the empiricist sense, is not so much wrong as meaningless.

It follows, then, that there can be no rigid separation of facts and values. We perceive things in the world from some standpoint; "cancer" is not mainly a biological fact - it is (in humans at least) an undesirable feature of human existence. The researcher, similarly, is

not an objective recording device: she is a human person with her own subjectivity - her standards, values, and interests. When she does some research she begins with a problem (which I have shown earlier to be an evaluative notion), gathers data she believes to be important and interprets it from her own value standpoint (how else, it is argued, could she interpret it?).

The researcher cannot escape her own subjectivity. She is not just an instance of "the scientific community" or "educational researchers". She is a particular human person with beliefs, values, attitudes and interests which shape her actions as a researcher.

At this point, a crossroads looms. Captivated by the subjectivity, we can retreat into total relativism or even idealism: reality is whatever we make it. The individual constructs her own reality and each reality is equally valid. No one may pronounce judgements on any personal reality. Researchers will recognise this view in recent phenomenologically based social science. Down this road lies a subjectivism which undercuts our pretension to being scientists at all. The individual is supreme if somewhat impotent.

On the other hand, by concentrating not on our subjectivity but on how subjectivity is shaped by sex, family, class or national identity we can shift attention completely from the individual. Stress is now placed upon the formative groups - we concentrate on families (as in family therapy), groups (as in traditional sociology), classes (as in Marxist social theory).

Positions such as those of family therapy, important as they are practically and in theory, are not relevant to our concerns today. Similarly, while traditional sociology can teach us lessons and invite our criticism, it is not as central to our concern as it once was. But in terms of a consideration of the individual the radical critique usually termed 'Marxism' is crucial. For, at least in the common mind, such theories devalue the individual in favour of a monolithic "mode of production", "class system" or "state".

This rather strange conclusion is reached in this way. If reality is created by us as individuals, it is a short step to the view that ultimate reality is created by us-in-unison - ideas such as the General Will, or Hegel's Absolute appear, and the individual ceases to count in the face of the supreme reality which stands beyond each of us.

To sum up: the empiricist tradition cleanly separates knower from known, and values the objectivity this makes possible. At the same time, because of the gap between knower and known it favours a tentative view of truth. Paradoxically, however, this can lead to a dogmatic reliance

on procedures while not recognising that the procedures themselves involve a position on human nature and human knowing.

The "Continental" position, on the other hand, unifies knower and the known and makes all knowledge subjective in the sense that it involves human persons **in the world** judging objects and persons also **in the world.** This can lead to a subjective version of truth or (more interesting, and more dangerously) to the view of a monolithic reality of which we are a part but which collectively we can know. On this view, there is a right answer and it can be known by some. In this answer the individual recedes to the background. Truth exists beyond individuals and it can be known with certainty by those who share its creation. Dogmatism often follows this certainty.

These two traditions have led to two approaches to educational research. The first focuses on atomic individuals who in the end are combined into a collective sum with aggregates, means, percentages and correlations. The other begins with the group - society, state, social class. In recent years we have seen the two models in bitter conflict. One accuses the other of doctrinal dogmatism and in turn it is criticised for its fixation on technical or methodological matters.

My hope is that we are now moving into a more balanced phase which is not just a woolly "let's be moderate" doctrine but depends on the logic of the individual. For the individual human person is an inherited structure involving both a set of human limits and particular potentials. The work of the sociobiologists, despite the problems, has surely redressed the balance towards seeing current humanity as a stage in the evolutionary process. Similarly, we now are in a position to recognise more fully that the individual human being develops into a human person only within a social context in which selections from her various potentials are developed, shaped, and encouraged and provided with any content they have. There may be a general disposition towards, and a specific aptitude for, music: whether this manifests itself at all depends on the cultural environment and whether it is revealed in Gregorian chant, bongo drums, or string quartets is totally dependent on the social world.

An individual, then, can now be seen as a human person with a general and particular genetic endowment shaping her future within a particular context. Thus, for example, we find an emphasis in counselling not on an isolated individual but on a person as a member of a dynamic group - family therapy replaces individual therapy. This, I hasten to add, is more than a variant technique. It is a metaphysical

change which treats the family (however defined) as the basic unit in which terms like "deviant", "disturbed" and "unhappy" find meaning and which are the focus for "therapy", "treatment" and "cure".

This is being taken further to provide an overall understanding of the family which is suited to the contemporary world. Neither the individual nor the family can be taken as a given in the new "critical" approach to studying the family. As in conventional research, child-rearing practices and attitudes are to be studied but as Poster (1978, p.151) puts it: "The problem under consideration is family structure not individual character traits" and further more, "each society can be seen as constituting a particular pattern of relations encompassing both the parents and the children. These relations...constitute a unique pattern which defines family life". Here structures seem to dominate but the point is also made that only by shaping the emotional life of children can the family sustain and perpetuate itself. Thus while the structure is sociological the mechanism is psychological and neither individual nor group can provide the complete story.

Similarly, in the area of mental health we are increasingly confronted with positions which turn from individual endowment, potential and behaviour toward one's role or relationship with others. Mental illness changes from being a malfunctioning of the individual mind and becomes a disturbance in relationships. Thus in the 70s we were assailed with all those seemingly radical critiques of the "mental health ideology" - Szasz, Laing, and Goffman argued in various ways for the view that mental illness is a misnomer and conceals the efforts of societies to suppress and control. Peter Sidgwick (1982) writing from a genuinely radical perspective has put this movement in pespective. He argues that a genuine radical movement does not need to deny "individual neuroses or mania" in order to have a weapon to beat the capitalist system over the head - there are plenty of other evils to fight without denying that some individuals are suffering acute mental and emotional stress which can often be eliminated or alleviated.

A similar dichotomy has been present in the feminist movement since its inception. One pole was an existentialist individualism which demanded for every woman the choice of her own happiness - sexual and otherwise - and vigorously denied that women are different from men in any other way other than the purely biological make up. The other pole was the undiscriminating espousal of a marxist analysis - As Midgeley and Hughes (1983, p.13) put it: "Much feminist literature is sunk in the kind of unreadable Victorian Germanic language through which only the

acclimatized faithful can keep awake." On this view, the relationship between men and women is seen as analogous to that between capital and labour - the oppression of women is akin to the oppression of the proletariat.

Both these sorts of accounts have their problems and the women's movement is now grappling with issues which lie in the important hinterland between - to what extent are women the same as, to what extent are they different from, men and how does that relate to the individual woman - or for that matter to the individual man? To what extent is the traditional man-woman relationship analogous to, or an instance of, capitalist exploitation and to what extent is it a specific issue which cuts across political ideologies and economic systems?

These three examples - the family, mental heath, the feminist-movement - have been used - very grossly, I admit - to try to illustrate the thesis that in fairly disparate areas the dichotomy between individual and collective (never very sound logically) is breaking down and progress is possibly by some synthesis between the two perspectives.

Sophisticated social critics are coming to see that broad structural critiques, however valid, have to be somehow translated into individual relationships and, more importantly, that solutions must involve the actions of particular people in particular situations - or "sites" as the jargon has it. Terms like "resistance" are essentially ways of reinstating the role of the individual within a scheme in which structures are dominant.

So it seems, the rigid dichotomies which so wracked the 1970s are beginning to give way to a common ground on which ultimately all must meet whether to join battle or to discuss terms of peace. This common ground must be one in which the individual is fully recognised but recognised as a human person, shaped by her cultural context but able within it to make some sense of herself and to shape to some extent her own destiny. Without that common commitment, structural accounts and individual analyses are equally impotent.

I want now to consider two areas, close to educational practice and research, in which I believe a similar case can be made. These are: (1) intelligence and (2) moral development.

We can begin - quite appropriately in this setting - with the measurement of intelligence. Curtis and Glaser (1981) have shown clearly that changing conceptions of intelligence - i.e., mental characteristics of individuals - depend on both technical progress and social change. Their words deserve quoting in full: "The prevailing view of differences among individuals, and the way these views are assessed, changes with the

times as a function of both our scientific knowledge and the social and cultural setting in which this knowledge is interpreted." (Ibid p.111) Thus, they argue, in the nineteenth century intelligence was seen as a composite of mental faculties. These were seen in relationship to **The Origin of Species** as evolved capacities of humans. They were not regarded as important to social conditions, and hence group and individual differences were barely considered. As the century moved on, however, society began to see change as progress and the idea that status was a function of ability rather than birth gained currency and was used as a weapon to justify the breakdown of hierarchies. Wundt and Galton played their well-acknowledged role and in the United States Cattell related it to schooling as a "harbinger" of the passion Americans were subsequently to show for mental testing. The social interest was clear: to justify on scientific grounds the hierarchies which could no longer be justified on grounds of birth. At this stage intelligence was seen as a complex of mental functions.

The next step, argue Curtis and Glaser, was also taken in the United States. The first American versions of I.Q. tests were used to predict school success and to legitimise the fears of Americans about the influx of new immigrants. This led to the restrictions on immigration, based on scientific grounds - they had been shown to be less intelligent. Intelligence began to be viewed as a unitary capacity and tests began to be used to categorise generally and so to determine people's fate - their stream in a school, their army potential, their right to have children. All this was quite justifiable because as Thorndike put it in 1905: "The prizes which most men seek are, after all, in large measure given or withheld by original nature." (Ibid p.126) So in the twentieth century A.D. science confirms what Plato four centuries B.C. had posited: there are people of gold, people of silver, and people of bronze. And the point is identical: to justify in nature ("the gods" as Plato put it) certain social arrangements deemed desirable.

In the 1930s factor analysis reinstated different abilities again and "a flurry of research activity attempted to show how mental ability testing could result in both increased satisfaction to the worker and increased productivity." (Ibid p.128) (Or as Plato would have put it - there must be a match between a contented individual and a harmonious society.)

More recently, we have entered the phase of cognitive analyses of specific aptitudes. This has been fuelled by concern for equality and particularly for the problem of minority groups. By stressing that mental ability is an interaction between the structure of knowledge and

the processes of learning, this approach stresses the learned base for measured intelligence.

So, in terms of my thesis today, we face again the need to reconcile both the social dimensions of knowledge and the individual process of learning. We must recognise that historically the social and political have been inseparable from the technical and the scientific - and we would be most unwise to suggest that it is easier in the contemporary world than it has been historically. Nevertheless "a scientific theory of intelligence has been slowly taking shape" - a conception that has made a progressive as well as a retrogressive contribution. The lesson is, I think, obvious if rather vague. We cannot afford to abandon our quest to understand the mental processes of individuals. And we cannot deny the social values which colour this understanding or the political purposes to which it is likely to be put. Nor can we, like the makers of knives, guns or explosives, claim that our activities are technical and scientific while decisions about their use can be left to individual choice or social policy. Our concepts are already imbued with value judgements: "intelligence" is not a purely scientific concept. It implies a judgement about desirable human potentials and its content must be teased out in social terms. Educationists and particularly educational researchers have to live with this tension, knowing that in a highly politicised culture they will never be loved by everyone.

The second area I turn to is the work on moral development associated in the 1960s and 1970s with the work of Kohlberg. Like all cognitive-developmental research this posited (and claimed to have verified) a generalised human sequence which would be useful in understanding individuals and in helping them to develop. High hopes were held for its usefulness in child-rearing, curriculum design and classroom practice. Such hopes have not been realised and we hear little these days of Kohlberg except as part of psychological history. My question is whether Kohlberg can be claimed as a casualty by the Left or by the Right.

Predictably, the Left has concentrated on Kohlberg's individualistic assumptions: the highest level is one of conscience, where the individual applies her high-level principles to concrete cases and this is contrasted with a stage of group conformity. The left-wing critic argues that there is a different contrasting system - the socialist one in which both individual and group yield to "the general good" not in the sense of majority opinion or conformity but in the sense of what is genuinely in the interests of the majority (the proletariat) in a system not based on oppressive relations.

The Right, perceiving the Kohlberg scheme as primarily a theory to be applied, is also concerned at its individualist assumptions. To them the theory seems to over-value individual moral decision-making and exalt "the principled" individual over group cohesion. To this critique they add the charge that the scheme is "humanistic" rather than "religious" thus smudging the fact that what is "religious" is itself a matter of political judgement.

As I say, it is difficult to determine which has had the most effect. Given the recent political thrust of Western societies my guess would be that the Right has done more harm than the Left - although in rarefied academic circles the Left may well have dissuaded some from pursuing the research they would otherwise have pursued.

For myself, I believe that both theory and practice are the poorer for the relative demise of this development model. For after all, what is the point of structural analysis if it is not predicated on high level moral principles such as justice? And what is the use of changing people's perceptions of their social reality if they cannot, in the end, make judgements based on principles rather than self-interest or group pressure?

The either-or has conquered again. We are concerned either about the individual's moral judgement or about the social conditions which shape conventional morality. To adopt one is to rule out the other and to do research on either is to reveal one's bias.

I want to suggest that the dichotomy is an unnecessary and dangerous one. Morality is both universal and context-bound and the individual has to come to terms with that. The Marxist who tends to argue most for its contextual nature is also the first in practice to assume that it is not: terms like "oppression" and "exploitation" gather their political force from their timeless, transcendent quality. It is this which makes Marxism an impressive moral movement. The right-wing movements are to the fore in asserting the universal quality of morality but their practice testifies to their readiness to treat as eternal verities what are clearly time-bound, interest-bound, and class-bound social views. The particular views of property-relations and of families are cases in point.

Our moral education, our theorising about morality, and our research on moral learning must be more assured and courageous. The morality of an individual cannot, of course, be taken as a given, an ineluctable fact about her. In this sense, individual conscience is as uninteresting as individual sense perception (people can be colour-blind and they can be

moral-blind). Similarly, global explanations of morality are as unimportant as global explanations of works of literature. The interesting question is how (or if) in a social context, individuals can be helped to more adequate perceptions of moral obligations and rights and to more generalised concern for their fellow human beings. It is not primarily a question about individuals or social groups but about a human existence in which the dichotomies seem purely academic.

At this point, as I move towards a conclusion, the various strands must be brought together around today's question: What is the significance of all this for educational research? This is not easy to answer for although the general thrust is clear enough, the full significance of what has been said can be grasped only by those who are at the front line of empirical research in education. I trust we will hear from them over the next few days.

It seems clear, however, that educational researchers cannot in future be so ready to see themselves as neutral, objective, value-free commentators on the system or, alternatively, as helpless pawns in a game in which social classes, interest groups or power elites make all the play. Both these contain important truths about social science and educational research but each is misleading and damaging both to the enterprise and to the people it is supposed to serve.

Apart from this broad claim, there are particular lessons to learn.

1. Value issues are to the forefront as never before. As educational researchers you have to ask what is education for and how best can schools fulfil their role? You will need to address the point and purpose of student assessment, not simply list the various techniques with their "advantages" and "disadvantages".

2. Similarly, political issues will be closer to the surface than has been traditionally comfortable. Whose interests are we serving? Whose sectional values are we endorsing? What are the consequences of our actions? Who will benefit and who will suffer as a result of our activities?

3. In all this, the individual must be as central as ever before. Whatever the social realities, whatever the ideological standpoints, it is the individual who learns, lives, chooses, suffers, dies; it is the individual who is caned, stereotyped, reviled, failed, rejected, and certified as unemployable.

But this is no atomic individual able to grit her teeth and by her own efforts conquer all. For she is shaped by so many forces and, at best, is in some kind of dynamic interaction with her world. And there are not as it were limiting factors on her individuality, to be ignored

or left to someone else to handle. They are as definitive of individuality as a person's genetic structure.

This tension can, finally, be illustrated by a consideration of computers and computer education, by any standards an important aspect of education in the decades to come. It is very easy for the layman to see a computer as a piece of technology to be used or as a social force to be studied ("Computer Awareness and Keyboard Skills" as the draft proposals of the curriculum review had it). But this is to miss the point I have been making all along today. Seymour Papert (1980, p.29) puts the matter thus: "What is happening now is an empirical question. What can happen is a technical question. But what will happen is a political question."

The choice in education, Papert argues, is between computers as teaching instruments and computers as learning aids. This choice is not a technical one. It rejects differences in educational philosophies and in views of childhood. The computer can be then, like other aspects of education, a force for domestication or for liberation. Without this reminder, how easily might researchers study the effects of computers on learning as if the questions are purely technical ones answerable by an objective methodology. And if research on computers is political what about research on human intelligence, motivation or moral development?

To have covered in forty minutes the ground from Descartes to the use of computers is no mean feat - even for a philosopher. I hope that in doing so I have not been unduly superficial or simplistic. I know that I have asked many questions and given few answers. But I hope too I have shed some kind of conceptual light on the individual in education and on the tasks ahead of us.

REFERENCES:

Curtis, Mary and Glaser, Robert, 'Changing Conceptions of Intelligence' in David C. Berliner (ed.), **Review of Educational Research**, A.E.R.A., 1981, pp.111-148.

Midgley, Mary and Hughes, Judith, **Women's Choices: Philosophical Problems Facing Feminism**. London: Weidenfeld and Nicholson, 1983.

Papert, Seymour, **Mindstorms: Children, Computers and Powerful Ideas**. N.Y.: Harvester Press, 1980.

Poster, Mark, **Critical Theory of the Family**. London: Pluto Press, 1978.

SOCIETY AND EDUCATION

Jack Shallcrass

A bit over 30 years ago my son, 8 or 9 months old, had to go to hospital. He was suffering from a medically induced condition which the authorities could not cure. To prevent scratching, the hospital staff tied his limbs to the 4 corners of the cot. We watched the vitality drain out of him never to return fully.

Visiting was 3 times a week for 40 minutes or so. At the end of visiting he would cry inconsolably. Perhaps, they suggested, it would be better if we didn't come so often because the visits were so upsetting.

I tried to discover what the doctors were thinking about the case and what progress they were making. Their responses were to provide comforting noises but no information. "He is being kept under observation"; "The treatment is proceeding", etc. He had passed inexorably into the power of a professional system from which we were excluded. Parents often feel like that about schools.

Some years later my son's daughter nearly died at about 9 months. Almost too late she was diagnosed as a coeliac, unable to digest anything with wheat flour. For some weeks her life was in the balance as she lay in the children's ward in the same hospital where her father had been.

It was still a rather forbidding, unattractive place physically but in all other respects there had been a miraculous transformation. Now anyone could visit at any time. The ward was alive with parents, grandparents and secondary school pupils helping out. Parents could stay in the ward and were encouraged to do so. My wife and I spent time there every day feeding children, nursing them, changing them, dancing and singing with them. It was a joyful place, full of people and life and love.

How was the change made? Geoffrey Weston, Professor of Paediatrics told me that he had been persuaded by the nurses of the superiority of this humane, caring, holistic style. It was a new world.

Why do I choose to discuss so subjective a topic in a conference of academics and researchers? For several reasons. First, I do not have the impulses or the skills of an academic or of a researcher so am forced to be what I am - a teacher whose instincts are as much theatrical and interactive as intellectual.

Second, I've spent the day watching some of the material I had planned to use pre-empted by others.

Third, because I think the changes it illustrates may be symptomatic of a new social and intellectual paradigm. If so, it is our business.

We are living through a fundamental change which we cannot fully understand because we're part of it. The old paradigm, in this case industrial culture, is failing and there is no alternative to hand. The death throes of the old are not pretty or comfortable. In the short-term there are sagging economies, growing national and international inequalities and endemic unemployment. As the old assumptions and values fail there will be more central power, more coercion and more sophisticated forms of social control to protect the privileged.

A growing number of commentators argue that it is not just a failure of the economic system but a failure of the culture and its values. If this is so, our work may be seen as a way of tarting up a failing system with all the significance of shifting the deck chairs around the Titanic.

We, of course, are in an ambivalent position when discussing change, particularly in education, because we are not only "successful" products of the system, but are some of its chief beneficiaries. I was interested this morning to observe how difficult it is for us to escape the confusion there is between education and schooling.

A commentary on the nature of the changes we face came from Yehezkel Dror when he visited New Zealand a year or two back. He was here to advise senior politicians and planners. Dror is the founding father of Social Planning and still its leading authority. His message was brutally simple and clear. All the indicators available to the O.E.C.D. suggest that we are not in a short-term recession but in a long-term depression that will cause fundamental changes in industrial culture. How long ahead? As far as we can see, maybe 20 to 25 years.

He went on, for the last 200 years or so people in industrial societies have learned to expect more because they lived in a culture of growth. There have been downturns, often serious, but there's always been confidence that the upturn would follow. More often than not the

depressions were resolved by war which used up surplus stocks and set the process of capital accumulation going again. That is no longer an option because it would be terminal.

So we have a culture of "more", based on the expectation of annual surpluses, which is frustrated by the fact that since the mid-seventies there have been only deficits. Over the industrial years we evolved a complex system for sharing out the annual surpluses. It became our biggest and most absorbing pastime dominating elections, budgets and wage rounds. What's in it for me? Never, what's best for the country?

Unfortunately, systems which were designed to share surpluses can't be used for sharing deficits. Most of us can see very clearly how other sectors could manage with less but know, beyond any doubt, that our own sector provides a selfless public service of indisputable necessity. Of course these claims always have the loftiest motives though at base personal greed is never far away.

Indeed, the economic system needs individual and national greed to keep going. Without it there would be rapid decline. Eventually it is that aspect of industrial culture which is in trouble.

What options do we have as individuals? Only two, said Dror; either we voluntarily accept less or we will be coerced into it by increasingly powerful governments. Voluntarism is not a starter because social habits don't change as fast as that, because there's no mechanism for it, and because no actual or potential New Zealand government would pass up the chance to take more power. The process of coercion is well advanced. Some commentators see this as the road to fascism, at first, a friendly, even benign type but, as history tells us, there's a fine line between the benign and malign. Soon those who enjoy privileges and power demand that the government use harsher means to protect them and their position. That's when overt oppression becomes the norm.

A prudent gambler would have to bet that, in the short-term, that will be the most likely scenario for New Zealand and probably for Australia. During such a period we must somehow keep the alternative alive. If we do, it will be contrary to the normal pattern of educators being the mirror of prevailing attitudes and values.

Preparations for an oppressive social regime have been afoot for a decade or more. The media have been trained into a complaint self-censorship, there's a populist anti-intellectualism, and most potential critics have learned to keep their heads down.

Dror sees all this as evidence of a failing culture not just of capitalism but of all industrial societies. It is industrial culture that is going to the wall. Its costs have become too high; it does too

much damage to the eco-system and it raises expectations that cannot be met. Its inner contradictions are now serious and probably destructive.

Thomas Kuhn argues that paradigms change when the anomalies associated with them became embarrassingly numerous. Time will tell if our embarrassments are sufficient for a paradigm change.

Of course, all this is our business because as educators we are the guardians and the gate-keepers of the culture. By the rewards we offer we encourage people to see life through acquisitive, competitive and exploitive eyes. Unwittingly we use knowledge to gain advantage over others and encourage them to do likewise. Of course, there are the best possible academic reasons for all we do in safeguarding the integrity of our subjects and our institutions. But I wonder how that looks to the unemployed or to any of the growing army of the exploited, the discarded or the defeated.

All societies have three major functions for which they are responsible. They must be able to sustain authority, to arrange the division of labour and to organise acceptable allocation of goods and services. Major or prolonged failure in any of these will normally lead to social breakdown and change. Dror argues that there is serious failure which requires fundamental cultural change.

This may well prove to be because the perception of natural reality which has guided the industrial age is no longer adequate. All cultures derive, to a marked extent, from particular views of the natural world. Industrialism was built on the intellectual structures created by Descartes and Newton. It was a world of separate systems which were understandable in largely mechanical terms. The industrial model of organisation reflects these perceptions.

Contemporary views of natural reality are being reshaped by particle physics whose domain is the interior of the atom. Here physicists have found a world that is holistic, interdependent and indivisible. This is fundamentally different from the Newtonian world view.

Changes in perception and behaviour that reflect these contrasting views of reality have begun. The experiences of my son and his daughter indicate the change. His experience was in the old industrial model. It was bureaucratic, fragmented, run by professionals whose own power was dominant, was rationally based and was largely male. My grand-daughter's experience was in a new model that was participative and holistic, was run by professionals whose motive was service, was animated by both rational and non-rational thought, was female and was guided by a basically ecological ethic.

There are other signs that similar changes of view and behaviour are welling up around us. The environmental movement, the women's movement, the co-operatives and the Maori renaissance among others. Look to those who have the least to lose for they are the change agents. They are still minorities whose thinking barely touches the big institutions or the political parties. Institutional inertia is a great protector of the status quo.

Power also has a strong inertial effect. Those who enjoy it under one regime do not willingly change the regime. Only when minority opinions come near to critical mass will politicians and other "leaders" hoist new flags.

The process of change has been illuminated by Chris Argyris and Donald Schon of the Harvard Business School. Ideas are born in the minds of individuals who are unable to give them life without support networks. Our way of introducing change is to take individuals from institutions, retrain them, then send them back to change the institution. Argyris and Schon have shown that the best success rate for this practice is about 5%. If we wished to design a procedure for avoiding change we couldn't do better.

Philosopher Martin Buber throws light on this in his writing on community. He believes that industrial society creates collectivities which are collections, bundles, ad hoc groupings that interact only superficially. Their overall effect is to fragment life. That was the hospital model my son suffered. In contrast Buber sees communities as groups united by common, transcending purpose, where power is inherent in the shared activity. Our grand-daughter was saved by such a community.

If we are seriously bent on constructive change we must accept the possibility of a paradigm shift. There is no certainty that it is happening but, in the face of the evidence, it would be prudent to be prepared.

Though it is not sharply defined, it is possible to see the outlines of a new paradigm. It will move from competition to collaboration; from acquisitiveness to stewardship; from paternalism to enabling; from authoritarianism to reciprocity; from single answers to multiple possibilities; from reductionism to holism; in brief towards an ecological ethic. Essentially this will demand that we accept ourselves as a part of the total living organism and not, as our behaviour has suggested, a cancer within it.

The plundering and exploitation cannot be stopped but it can be slowed down. There are acceptable means of creating and using energy that don't do violence to ecological principles. Entropy can't be

stopped, but the universal tendency to breakdown can be moderated by living with natural laws. Enough is known of systems theory for us to create systems with feedback mechanisms for self-correction but only if the value system moves from greed to harmonious survival.

In the meantime we can't wait for the revolution or for more appropriate institutions; we must get on with living. That requires that we dream dreams and do what is possible each day. If we do what is likely to promote the ecological view and the values associated with it, we will, of necessity, be subverting existing institutions. That requires vision, a delicate sense of balance and considerable cunning. Remember, those who enjoy power can smell heresy.

Paulo Freire provides the educational model for such behaviour. He argues that learning should enable people to understand themselves and the politics of their situation. It should also empower them to act. The process is reflection which leads to action. He was expelled from Brazil for his subversive thinking.

One further thought that may be helpful. After a lifetime of searching for answers I'm inclined to think that there are seldom, if ever, any answers but only processes; that there are no solutions to problems but only ways of managing them. That view rests easily with Freire, with Buber, and with the possibilities of the paradigm inherent in modern scientific views of natural reality.

And what does this mean to research? I suppose much the same as it does for teachers, for parents and indeed for all citizens.

First, it is important that the existing work continue. For the NZCER that means responding to requests for service and also extending its work in social networks around schools. However, to do this alone is to run the risk of becoming irrelevant; it could be the deck chairs on the Titanic game.

Second, is to ask questions about what we do or might do. Does it empower more people? Does it enable? Does it increase equity? Does it heighten awareness? Does it politicise? Does it liberate or oppress?

With regard to these questions we should welcome the research by Hugh Lauder and colleagues into school success and class background; also that by Adrienne Alton-Lee into the effects of power sharing on children's learning.

We're not into a new ideology yet but we are on the edge of a change of consciousness that will produce one. As we face the tumult of the world we are now aware that whatever happens is our doing; the buck does stop here. Teilhard de Chardin believed that our fate was to give conscious and moral direction to future evolution. The process of doing

it is education which might even include schooling and research. What we do will advance or retard hopes, visions and dreams which in part are always just beyond the reach of consciousness and reason.

Mr Justice Olliver Wendell Holmes understood something of this when he said: "Have faith and pursue the unknown end". That may not be enough but it's a beginning.

TE WANANGA O RAUKAWA

Whatarangi Winiata

Introduction

In accepting the invitation to speak to you and, indeed, as I stand before you I was and am aware of the expression, "Waiho ma te tangata e mihi", which cautions one about speaking about one's own work. It is my hope that you will accept this address as an invitation to you to offer critical comment on an experiment in which Maoridom (albeit a small section of it) is engaged.

Acceptance of the offer by the Council to put Te Wananga o Raukawa before this distinguished group I could not resist, notwithstanding the advice on modesty from my Maori ancestors.

Te Wananga o Raukawa is a private university. It was established by a body known as the Raukawa Trustees. It offers an undergraduate degree, the BMA, Bachelor of Maori and Administration; it has an honours degree and it will offer other graduate studies. In addition to its teaching functions it has research and archival functions.

An Historical Perspective

The confederation of iwi and hapu of Ngati Raukawa, Ngati Toarangatira and Te Atiawa is most closely associated with the region between the Rangitikei River and Porirua. The Raukawa Marae Trustees, a representative body of these iwi and their hapu, gave formal recognition to the existence of their centre of higher learning when, in April 1981, they resolved to establish Te Wananga o Raukawa "for the advancement of knowledge and for the dissemination and maintenance of knowledge through teaching and research". Te Wananga o Raukawa is a reformulation of an ancient institution, namely, the whare wananga, the original and most senior of which was Rangiatea. For the confederation it represents another joint venture of the three iwi named above in the post-European era.

The first of their major post-European initiatives was the building of a spiritual house based on Christian beliefs. This was done in 1849-1850 and they acknowledged the seniority of its purpose by naming it Rangiatea. It continues to serve passing generations of the confederation.

The next major excursion into activity of European origin was in the 1880s when the confederation established its own horse racing club and absorbed its European neighbour which was in financial distress. Two decades later in 1908 the confederation built Otaki Native Boys' College on land provided by the confederation to the Anglican Church for education. Financial difficulties caused the Anglicans to close this school after thirty years of operation during which time it educated youth from the confederation, including Inia Te Wiata, and, from outside, Manuhuia Bennett and Ben Couch.

In 1936 the confederation built their marae-matua and, using the Native Purposes Act 1936, created The Raukawa Marae Trustees, a body of sixty-nine members representing the score of iwi and hapu which comprise the confederation to administer it. This is the parent body of Te Wananga o Raukawa.

The fifth important joint development by the confederation was the creation of the Otaki and Porirua trusts in 1943 based on the lands which had previously supported the Otaki Native Boys' College. These are educational trusts and their beneficiaries are the children of the iwi (and hapu) of the confederation. At present the market value of these trusts is about $2 million and annual scholarships totalling about $50,000 are assisting 200 children of the confederation.

In August 1975, the Raukawa Marae Trustees (better known as, simply, The Raukawa Trustees) began discussing the concept of iwi (tribal) and hapu (sub-tribal) planning and began a 25-year development experiment. This experiment, which is known as Whakatupuranga Rua Mano - Generation 2000, has emerged as another joint venture of the confederation. In the eight years ending this March a hundred seminars (up to ten days in length) involving 6,500 Maori and Pakeha people have been designed and directed by Generation 2000. (Other marae-based seminars with at least these numbers again but not under the umbrella of Generation 2000 have been conducted concurrently by individual hapu and iwi of the confederation.)

The Raukawa Trustees established Te Wananga o Raukawa as a natural and necessary extension of Whakatupuranga Rua Mano having put proposals to establish a centre of learning to ministers of the crown in 1978, 1979 and 1980 and to departments of state in 1980 and 1981. These proposals

did not find favour in any of these quarters and we are reminded of the question: Ka pikitanga hoki to te kaki? Our response would be: Yes, talking can be like uphill work.

The Contemporary Context

The last 150 years has seen dramatic changes in the life-style and institutions of Ngati Raukawa, Ngati Toarangatira and Te Atiawa, and for the whole of Maoridom it has been a period of both high excitement and considerable pain as the Maori people have grafted onto their own a totally different culture.

Regrettably, the organization of and support for advanced Maori teaching and learning is in extreme disarray in the region spanned by the confederation of Ngati Raukawa, Ngati Toarangatira and Te Atiawa. This condition is a consequence of the incessant (and increasing) pressures on Maori institutions from local and national bodies which have not been able, or have not chosen, to embrace Maori institutions and teachings. The "tanga" of the iwi and hapu which promoted Te Wananga o Raukawa is not incorporated in the courses of this country's educational bodies so as to ensure its advancement, dissemination and maintenance through teaching and research.

Te Wananga o Raukawa aims to contribute to the further development of the confederation and of the wider community by producing bicultural administrators, teachers and researchers in the expectation that their activities will enhance the quality of decision-making, particularly on issues affecting the confederation but also on matters which have a bearing on the well-being of the community at large. At present the non-Maori majority in New Zealand has veto power in major decisions affecting Maori people and this veto is exercised largely by senior decision-makers (including teachers) who do not have knowledge of and sophistication in the "tanga" of the confederation or in Maoritanga in general. In response to this situation the wananga, in addition to its degree programme, provides short-term residential courses. In 1984 it is offering six half-day seminars for middle and senior managers who are participants in the residential courses of the New Zealand Administrative Staff College.

At this time Te Wananga o Raukawa has seven full-load and five part-load students engaged in various elements of the three year BMA (Bachelor of Maori and Administration) course. (A full-load course requires about 1,300 hours of work and the academic year runs from January 15 to December 15.) It also has one graduate student and ten students doing six month certificate courses.

Most of the staff provide their services voluntarily. Where honoraria are required the money is found from student fees or koha. The wananga has one full-time staff-member on secondment from the Department of Education for one year as from last month to design and administer experimental work on the immersion technique of Maori language teaching. The wananga is very grateful for this support and for the acknowledgement implied.

Two fields of study are offered. These are:

(a) Iwi and hapu studies: Ngati Raukawa-, Ngati Toarangatira- and Te Atiawa-tanga including contemporary developments and future study.

(b) Administrative studies: Integrated real-life case studies covering a wide variety of management decision areas.

ART: Iwi and Hapu Studies

This represents half of each year's programme of study and is designed to ensure that in three years of study students will acquire knowledge and confidence in the following subject areas:

(a) Maori language including formal whaikorero/karanga language, language for the presentation of issues and conversation language

(b) Oral literature including karakia, waiata, pokeka, haka, tauparapara and whakatauki

(c) history and artifacts

(d) decorative and performing arts

(e) iwi and hapu planning

(f) marae form and procedure

(g) whakapapa

(h) health

(i) land issues and

(j) management of change

Within the confederation of Ngati Raukawa, Ngati Toarangatira and Te Atiawa (or outside it by arrangement) and within the national and international framework of environmental factors.

ADM: Administrative Studies

The objective is to provide, through integrated case studies, a comprehensive understanding of a range of important management decision areas as they appear in diverse types of organizations, and as they are diagnosed and administered within national and international influences. The organizations (or activity units) which are studies include:

(a) industrial firms

(b) financial institutions

(c) Maori incorporations

(d) Section 438 trusts
(e) marae and hapu organizations
(f) local bodies (borough and county councils)
(g) public bodies (schools and hospitals)
(h) state corporations
(i) Government departments
(j) charitable bodies and
(k) Japan

The management decision areas which are studies include:
(a) leadership
(b) organizational development
(c) financial management
(d) marketing and consumer choice
(e) alternative futures management
(f) objectives, constraints and performance
(g) innovation and technology
(h) legal constraints
(i) reporting and
(j) information systems.

Japan has been chosen for a country case-study and this reflects a belief that Maori people have a comparative advantage in the study of this country. Moreover, it indicates a confidence in that country as a valuable source of ideas on the embodiment of cultural values in commercial activity; it is also a source of technology to enhance the industrial development of the region spanned by the confederation.

Research

A series of contemporary studies into aspects of the life of the confederation is being discussed. Proposals are being developed and work is progressing on some of the following:

(1) A census of the confederation in the 1980s. (1,325 interviews have been done.)
(2) The whakapapa of the confederation. (A number of manuscripts are available for this work which is proceeding - with caution.)
(3) The health experience of the confederation. (The census mentioned in (1) above contains some questions on health; more detailed surveys are being planned.)
(4) The land transactions of the confederation. (Some case studies have been done; others in progress.)

(5) The literature of the confederation. (Retaping and cataloguing and new recording and transcribing are being done.)

(6) Technological innovation and adaptation within the confederation. (A series of hui on the search for technology appropriate to the long-term development of the confederation commenced in 1983 and will continue for several years.)

(7) The 21st century: alternative futures, objectives and strategies of the confederation. (An ongoing exercise.)

(8) Hapu and iwi planning. (Research into the principles and problems is built into the teaching programme.)

(9) Maori language teaching. (Experimental work with the immersion technique is in its fourth year.)

Hapu and Iwi Planning

It is extremely rare in the mainstream of New Zealand society that a person of Maori descent is asked for his or her hapu (subtribe), iwi (tribe) or waka (canoe). Employers (in both sectors), schools, and other centres of learning, hospitals, the Statistics Department (whose full-time job it is to collect statistics), the Inland Revenue Department, the Department of Internal Affairs and so on do not concern themselves with this dimension of a Maori person's identity. Indeed the Department of Maori Affairs and the New Zealand Maori Council are inclined to emphasise Maori rather than tribal affiliations. It is, then, quite remarkable and significant that after decades of denial hapu and iwi continue to be major operating units in Maoridom.

It is, however, quite remarkable that hapu and iwi identification has weakened dramatically with succeeding generations of urban-born Maori people. Cross iwi/hapu or cross-cultural marriages and/or geographical separation from principal hapu or iwi centres (i.e., marae) have been major factors in this trend. The absence of any institutional reinforcement has been a contributing factor.

We have emerged from a tradition in which hapu and iwi planning and management was implicit in all we did. Our haputanga and the associated whanaungatanga (intra-hapu) were vital to the existence of the individual. We clung to our hapu and we lived by its rules because to not do so was dangerous; survival for the individual was more likely as an active member of the hapu than as a non-entity outside.

At the end of a century and half of European individualism in all its pervasiveness our haputanga and whanaungatanga are not as necessary as they were. While there are many signs that the lack of identity creates trauma for our people the sources of stress are multiple and in any one case, may not be traceable to the absence of ties to whanau or hapu.

As the influence of individualism has waxed and the protective role of haputanga and whanaungatanga has felt the reverse our hapu and iwi have not fashioned techniques or refined their skills for the purpose of attracting their people to their hapu or iwi. We are unskilled in forming policies and implementing programmes which will make the whanau, the hapu or iwi valuable and vital again to the individual. There have to be good reasons for individuals to give their time, talents, energy, resources as well as their memories and loyalties to their hapu and iwi.

If we know how to measure the resources of a hapu or of an iwi we might then be in a position to formulate plans to expand those resources and to make our hapu or iwi wealthier, more attractive and more productive. We have two problems: one is to define resources and productive activity; the other is to measure these. Academic and practising accountants around the globe spend their waking hours and, occasionally, I suspect, their dream time on these two problems in commercial or economic contexts. Unfortunately, they have not prescribed any solutions to these issues which will advance our search for resolutions to the two problems cited above.

At Te Wananga o Raukawa we are trying to obtain insights into this field and to formulate strategies to expand tribal resources and/or productive activities.

Conclusion

Te Wananga o Raukawa was created in April 1981 primarily to produce bilingual and bicultural administrators with their Maoriness rooted in the "tanga" of Ngati Raukawa, Ngati Toarangatira and Te Atiawa.

We cannot expect the established centres of higher learning to teach our people about themselves in the way in which we would want it done. They must, of necessity, give a generality to their content. At Te Wananga o Raukawa we have accepted that there are trade-offs. We give up the benefits of perspective through generality in favour of knowing ourselves well through detailed study about ourselves.

Te Wananga has coupled this approach with and through administrative studies in the hope of seeing a favourable return by way of runanga and community development at relatively low capital and operating cost.

THE CONDUCT OF EDUCATIONAL RESEARCH

John Keeves

It gives me very great pleasure to be present for these two days at a seminar to mark the occasion of fifty years since the establishment of the New Zealand Council for Educational Research. As you already know, I am actively engaged in the conduct of educational research in a sister institution to the New Zealand Council which we are honouring today together with John Watson at the time of his retirement from the NZCER. Educational research, like other areas of human activity, is undergoing change and it is appropriate that at this time we should pause briefly to consider issues relating to the conduct of research into educational problems.

The undertaking of educational research is an exciting activity, as is any quest for a greater understanding of the world in which we learn, work, and play. However, because the field of education is so vast and includes activities which take place not only in schools and universities but also in the home, the peer group, in the office and factory and on the playing field, as well as through the now immensely powerful mass media, the impact of educational research is often seen to be vague, indefinite, and not tightly focused. It is also important to recognise that in the field of education, by and large, the body of knowledge that has the most profound influence on educational processes is derived not from research or scholarly activity but from the accumulated wisdom of people working in schools and in the variety of institutions in which educational programmes are provided. Systematic and cumulative research and development in education is a relatively recent phenomenon, commencing only during the twentieth century and only gaining the potential to make a substantial contribution on a world-wide basis during the late 1960s and the 1970s.

The Outcomes of Educational Research

Educational research and development yield outcomes of three distinct types. First, there is the identification of practices that have a direct relevance and immediate application in schools and classrooms. Related to these practices is the development of tangible products that incorporate research-based knowledge. In the 50 years of its existence the New Zealand Council for Educational Research has made a very important and distinguished contribution in this area. I can say this with knowledge of the extent to which tests, such as the Progressive Achievement Tests, materials to improve the effectiveness of study, such as the SWOT and SHEIK materials, and the spelling materials, such as SPELL-WRITE, are being used in Australia.

The second type of outcome involves the findings arising from research that can be used for educational policy-making. It is rare for an individual research study to yield findings that can be used alone to change policies. The complexity of most educational activities and of the settings in which such activities are carried out will, in general, restrict the applicability of the findings derived from a single investigation. It is, in addition, important to recognize that decisions involving the making of policy in education are rarely single acts, they emerge out of a very complicated mosaic of pressures and influences exerted by interest groups. What is important is that the debate occurring prior to development of policy is informed by a number of research studies, and that decisions are not taken that ignore or run counter to the research findings that are available.

It is clear that underpinning the first and second types of outcome which I have referred to is a third type concerned with the construction of a body of knowledge about the educational process. It is necessary to recognize that knowledge which is largely of a theoretical nature, is nevertheless important even if it does not appear to have an immediate application. Contrary to common belief, one of the major outcomes of the very substantial investment that has occurred throughout the world since the late 1960s and early 1970s in support for educational research, has been the gradual assembling of a very considerable body of knowledge about educational processes that is only now being built into coherent theory.

The Research Enterprise

I turn to consider the nature of research activity in education. It is important to recognize that there are not tightly defined methodologies and procedures for the conduct of educational research. There are, however, two key characteristics of educational research that must be

considered in this context, namely, that educational research is, first, multidisciplinary and secondly, multivariate. For a long period the stereotyped view was held that the educational research worker, trained in the discipline of psychology was able to prescribe for pedagogical practice, the "dos" and "don'ts" that had been derived from the laws and generalizations of psychological theory.

As an alternative to the view that research in education should be derived from the field of psychology, it is sometimes claimed that educational research should be concerned with a field of educational or pedagogical science. However, the issues associated with education are so extensive and wide-ranging that such an approach would be too restrictive and would tend to deny researchers of educational problems access to a broader knowledge base that comes from a multidisciplinary approach. During the past twenty years many developments that have taken place in educational research have occurred through thinking about educational problems from the standpoints of the social sciences of sociology, political science, economics, and demography, or the humanities which include philosophy, history, anthropology and linguistics, or the behavioural sciences, which incorporate the many branches of psychology. These fields of learning, it must be argued, have the potential to contribute to the examination of educational questions. The multidisciplinary and interdisciplinary approaches to educational questions have been highly rewarding and productive. However, the integration of knowledge derived from a broader base has become more complicated and the application of that knowledge to both policy and practice has become considerably more difficult, because of the breadth of view required.

The second key characteristic of educational research is that, in general, it must deal with very complex relationships. It is common for an educational problem to be reduced to the study of the relationship which might exist between only two factors. In general, there is a multitude of factors which are relevant to the problem being investigated and consequently the problem must be seen within a many-faceted context and the study conducted within a multivariate setting. During the past twenty years the widespread availability of large computers and more recently of microcomputers has allowed the task of multivariate analysis to be more readily undertaken so that a complex network of relationships can be disentangled. At the same time the research worker in education has also sought to use some of the techniques of the anthropologist to study in depth the processes which operate within individual

institutions. By using both case study and ethnographic approaches, complex interactions can be investigated effectively without simplification and the possible distortion that the abstraction required for statistical analysis necessarily demands.

These two key characteristics of research in education carry with them the understanding that educational research has available to it a variety of theoretical perspectives, a range of tactics and strategies for investigation, and a multiplicity of procedures of analysis necessary for the examination simultaneously of the many factors that influence educational outcomes. Clearly the perspectives, the strategies and the analytical procedures employed in a particular study must depend on the nature of the problem being investigated. The challenge for the research worker is to examine thoroughly the problem, explore the wide range of options and choose procedures that will produce findings that are meaningful and that can contribute both to the assembling of the corpus of knowledge about the educational process as well as contributing to both policy-making in education and the improvement of educational practice in schools and classrooms.

The Strategies of Educational Research

The many-faceted nature of the educational process has suggested that many variables should be included in the investigation of a problem and that the procedures of analysis employed should permit the simultaneous examination of relationships between the many variables on which information has been collected. Until the mid-1960s educational research workers were largely denied the opportunity to analyse in full the rich bodies of data that they were able to gather. With the availability of the computer, the tedious and repetitious tasks involved in data analysis were largely eliminated. However, the 1960s were also marked by the beginnings of an epistemological debate both in educational research and the social sciences. This debate was clearly the result of opposition to the emphasis on scientific empiricism that was endorsed by many research workers.

Thus there has developed something of a conflict between the two major paradigms which are employed in the investigation of educational problems. The first paradigm is derived from the approach of the natural sciences that emphasizes empirical and quantifiable observations which can be analysed by rigorous mathematical procedures. The task of research is to establish casual relationships and to explain. The alternative paradigm is concerned with humanistic studies and is derived primarily from anthropology, but also draws on the approaches employed in

research in the disciplines of history and philosophy. This paradigm emphasizes qualitative information and the building of a personal interpretation of events but sometimes seeks to establish broad generalizations and to lay the foundations of theory that is firmly grounded in the world about us. These two paradigms are related respectively to both the nomothetic and ideographic approaches and to the Anglo-Saxon and Continental intellectual traditions.[1]

With the expansion of educational research in the 1970s both paradigms gained strength. The scientific paradigm continued to flourish as the processing and analysis of data were made easier. The paradigm associated with humanistic studies has also progressed as research workers trained in the disciplines of anthropology, history and philosophy have entered the field of educational research. Unfortunately the conflict between research workers who use exclusively one or other of these two alternative paradigms has continued. However, the resolution of this conflict lies not in the exclusive use of one paradigm in preference to the other, but rather in seeking to employ both as appropriate. This would again require a careful examination of the problem being investigated and the use of research strategies from each of the two approaches as would contribute effectively to the investigation of the specific problem. As a consequence research institutes must contain a range of staff who have expertise and who have been trained to work in both paradigms. In addition, it is essential that the two groups of research workers should not see themselves as having been trained within two disparate traditions, but rather as each being able to contribute in different ways to the investigation of educational problems.

In recent years a third approach to inquiry in the field of education has emerged. There has developed an emphasis on the evaluation of educational institutions and programs, largely to ensure that the now very considerable resources made available to education are being used efficiently, and in response to the movement in education for greater accountability. There is also a growing area referred to as "action research" that was advanced in the United States in the 1940s, and that sought to encourage teachers to examine critically and systematically the effects of their teaching practices. This tradition has emerged again in a new form, linked in part with the evaluation movement, but also directed quite specifically to the investigation of particular problems that have arisen in educational practice. Both evaluation and action research studies have a strong appeal because the findings from such investigations are seen to be of immediate relevance to the improvement

of educational practice. While not seeking to be critical of the contribution of such studies, it is nevertheless necessary to recognize that educational research must also aim to contribute to both the guiding and making of policies in the field of education as well as the building up of a body of knowledge and understanding of the educational process.

Priorities in Educational Research

The need for research into educational issues would seem to be unlimited and as a consequence each individual research worker, each research institution and each administrative body in education must identify priorities.

Research in all fields of inquiry from time to time changes direction, and there are three factors which have been identified as influencing significantly developments in educational research, namely: (1) a response to critical issues, (2) the impact of technology on research and practice, and (3) new ideas and new paradigms which are derived from other disciplinary areas. Time does not permit me to illustrate the effects of such factors, but examples can be found in the report edited by Patrick Suppes, **Impact of Research on Education: Some Case Studies.** It is, however, necessary for those who determine priorities both for educational research and in other fields to be mindful of these factors in their search for new trends and new directions of investigation.

It is clear that priorities for research cannot be determined by the research workers in isolation. The procedures for determining priorities must permit interaction to the full between research workers and users, and sometimes extensive debate will be required before one group can appreciate the views of the other and both parties can advance together to develop consensus about priorities. This is, of course, what often happens. Nevertheless, the restrictions and reductions that have occurred in the funding of educational research in many parts of the world during the early 1980s would appear to indicate that after a period of strong support for research by policy-makers, a breakdown in the interaction between the research workers and the users has occurred to the long-term detriment of educational practice and policy-making. Clearly it is neither possible nor desirable to attempt to develop universal research needs and priorities either today or in the foreseeable future. Nevertheless, it is not possible for individuals, research institutions, educational administrators or those who have responsibility for funding educational research to operate without their own sets of priorities. However, it is important to recognize that

educational research cannot and should not be expected to solve problems that are basically political and social problems.

The Dissemination of the Findings of Research

It is possible that, in part, the difficulties faced by educational research workers in many areas of the world during the 1980s with respect to the funding of research and support for research training arise from a failure in the effective dissemination of research findings. In this task we at the ACER have been filled with admiration for the efforts of our colleagues at the New Zealand Council for Educational Research in the dissemination of the products of research. They have developed a vigorous programme of publication both of the reports of research studies in a meaningful form and of their tests and educational materials. Moreover, they have been committed to ensuring that these products of research are widely disseminated and widely used. Also of particular interest has been the imaginative and stimulating work that has been undertaken over the past 10 years in the development and publication of **set: Research Information for Teachers.** This publication must have made a major contribution to influencing the views of teachers in New Zealand and Australian schools in many areas and thus to changing their practices and classroom teaching. Unfortunately, I know little of the way in which NZCER has been able to support information exchanges, but I believe that the New Zealand Council like the ACER has developed through the Institutes of Educational Research, a network of contacts throughout the country, and hopefully to assist those who are engaged in problem-solving programs to be better informed to carry out their work.

In conclusion, following a decade or more of intensive research and development in the field of education during the 1970s, the major task that confronts all of us who are engaged in educational research is the finding of ways of synthesizing the very substantial body of information that is available, and presenting these findings in a manner that is meaningful to audiences who are responsible for the conduct of education and who implement educational programmes in systems, schools and classrooms.

Footnote

1 See Ivan Snook's paper, 'The individual and education'.

THE FUTURE OF EDUCATIONAL RESEARCH FUNDING IN THE CONTEXT OF RECENT REPORTS ON SOCIAL SCIENCE RESEARCH

Marie M. Clay

I did not contract to talk today specifically on the future of educational research funding because I do not know what that will be. I am not able to predict the policy decisions of the Council of NZCER, nor the fortunes of the Department of Education's research unit in the competition for funds within that Department's budget approvals. What I agreed to do several months ago was to try to capture briefly the context within which educational research may have to operate. Research planning within government departments, and the machinery for funding have changed or are about to do so. I had anticipated that several important reports would be available by this time of the year. Three are, plus one I could not have anticipated.

I speak today as an academic researcher whose focus has very much been on the transfer of research insights into programmes or policies which will live and develop in the education system. I also have served for several years on a government committee concerned with what is happening to social science research. Finally, I was a member of a review committee of ACER last year, which provided me with new insights into educational research endeavours.

I assume that there should be three sides to a healthy body of ongoing educational research in society: firstly, a strong inhouse Department of Education research unit concerned with choices between alternative provisions, programmes and policies; secondly, an independent body of fulltime researchers who can study these provisions, programmes and policies from the outside with some independence, providing a public examination of the issues; and thirdly, the research on the frontier issues of education which I like to think could be generated by university researchers - those spare time weekend researchers given their

present teaching loads and student ratios. Education research in New Zealand has strong activities in the first two areas, and a substantial amount of contract research in universities has been funded in recent years.

Let me start where I want to end. NZCER's long history of effective functioning will not necessarily protect it in the present climate of research and economic interest in New Zealand. What will help is a high level of activity, contributions that will inform policy decisions, and contributions to Science and Technology development. As social science research increases in strength, which I believe it will, the independence and isolation of educational research could be challenged, the resources of NZCER envied, and its single discipline focus may be threatened. Policy politics may be important to give your attention to in the immediate future and in the next few years, whichever Government is on the front benches.

To defend those statements I want to talk about four reports, all published in 1984.

Paul Couchman (1984) reviewed the operation of social science in government departments, and provided an historical review of the activities of the social science subcommittee of the National Research Advisory Committee, Committee D. NRAC was established in 1964 but Committee D was set up in 1977. I was on the committee from then until 1980 and am at present its chairman. I was also its first representative on the SSRFC, a group we fought hard and long to bring into existence. Couchman's evaluation of Committee D is a reasonable account. His criticism that it has been passive fails to recognise one of the features of advising on social science research to government departments, and that is that the committee advises departments to act, and when the action comes it is attributed to the departments, quite rightly. What is of importance here is that change has overtaken the Couchman report already. He recommends that we need "a body with some 'teeth' so that it can more effectively co-ordinate government-funded social science (i.e., in terms of allocating resources, directing research effort, regulating the quality of research undertaken, etc.)".

Since he wrote that and before publication all responsibility for budget and resource allocation matters have ceased to be the concern of NRAC and its committees. A responsibility for research planning has replaced any financial or resource control. Couchman's report will give you a good sense of where we have come from. We must look to new directions.

First, however, I think I have to state what this has to do with educational research. Although social science has a great deal yet to do to convince New Zealand's many skeptics of its value, and although there are many ways in which the infrastructure of social science research must be strengthened, and although it is abysmally under-funded, nevertheless the gains made in the past seven years are unlikely to be lost. There is a general understanding now that two kinds of social science enterprise must exist. The first position recognises that all society's policies have a human component and all research related to the enterprises of government departments has social inputs and social implications. Paul Couchman's report as the first in a series, called the DSIR's Social Science Series, illustrates this point.

The second position recognises the more obvious contribution of social scientists to the issues and questions closely related to their fields of study, whether this is within government department research units, in independent research units, in universities, or in other groups in society.

It will not have escaped your notice that an emphasis exists today on science and technology in the service of economic development (usually expressed as "social and economic development"). Central to many of the interests of Government and government departments, and the interests of manufacturing, processing and production industries are issues of education, more often mentioned as training issues. At least this recognises the existence of humans who are learning, and it implies though it does not state a sound preparation prior to this tertiary level of training. For many people education's contribution to Science and Technology is in its relationship to job training and retraining.

If we look at this growing awareness of the contribution that social science research might make to the people issues of all research endeavours we may ask where are the trained researchers going to come from. This brings me to a report being prepared for publication shortly, NRAC's Working Party Report on the Training of Social Science Researchers (Robertson, 1984).

Some years ago Richard Barham tried to mount a Diploma of Educational Research to train, within the discipline, people who could apply a range of methodologies to educational problems. For, as any employing authority knows, a BA degree does not represent a research training, an MA degree with a thesis represents one piece of research as a (very formative) learning experience, and government departments rarely hire social science researchers with doctoral degrees. Even if they did this might only represent a second methodological string to the researcher's bow.

The working party recommends that any university diplomas set up to train social science researchers, and I understand that three are contemplated, should offer students a broad range of methodologies and a full range of analytic techniques, and further, that students be trained to negotiate with clients, to write and to understand some of the communication problems of transfer of research results into policy action. Given that universities will have to work to tight budgets I think we will continue to see discipline-oriented diplomas - in Sociology, or Geography or Economics departments. It will take commitment to interdisciplinary endeavour to get the preferred training off the ground and social scientists may not yet be ready to do this.

A research unit like NZCER and a strong department unit like the Department of Education's could more deliberately provide training apprenticeships.

The report also recommends more short-term courses on specific research techniques or issues. The SSRFC's seminar series has made a start in this area for Wellington-based social science researchers.

The third major report to emerge in the last two months was the Government's Science and Technology Plan, a working document, the first of its kind, describing strategies for research in some detail and across many fields. Within this grand overview individual research units or departments will set their own goals and the tactics for achieving them. This report was put together, under pressure of time, at the request of the Minister of Science by two scientists seconded from DSIR. Given the mammoth task, the lack of agreement among groups consulted, in particular the differences between users of research and doers of research, I think the authors did a very good job. That does not mean that anyone thinks that this is the final word in any area. It is the springboard from which the 1985 plan will take its direction, and if, in some areas, the strategies are wrong in the 1984 plan, they are there to be changed.

What of social science research in this plan, and within that, education research? There is a small problem here. The exercise was completed at the request of the Minister of Science, who also approves the SSRFC's budget, but who really has very little to do with the allocation of resources by social science departments to their own research units, nor any clout when a social science department decides it is uncomfortable with research and closes its research unit down. Given these territorial uncertainties, the social science subcommittee of NRAC worked hard and long at the entries of the Science Plan. If you have glanced at it you may assume our effort was to no effect. However, let me try to defend what I take to be the gains, by giving you some quotes:

- One of the functions of a Science and Technology plan is to be concerned with education and training (p.10).
- Planning must be aimed at producing conditions in which creativity can flourish among well-trained, enthusiastic, and highly motivated working scientists (p.13).
- Social science was aired under a heading Community Activities, Interests and Concerns, which included the advancement of knowledge about astronomy and Antarctica, the management of the natural environment, such as marine science and land use, social science and health research, and scientific services (pp. 81-95). It is mentioned again in the summary (p.15) and it even has the last word in the report (p.117)!

The statements about social science research in that report were hard-won by members of Committee D, and in the winning there was an education for me in New Zealanders' attitudes to "people" research. We rewrote the scientist-authors' early drafts. They paraphrased our drafts and recast them to fit what other scientists were telling them. After some "back and forthing" of this kind, we saw the authors as our allies and we were pleased to see that we had made a little impact. Then the plan went to NRAC Council members who also began to attack the text. Some wanted the social sections out, lest they appear soft, conciliatory or upsetting to the users and doers of science research. In the interests of retaining statements on social science research in this report we again redrafted sections which would allow the authors to follow the will of the main committee. Education was less likely to be deleted by the editorial scissors whereas ethnic, labour or mental health and justice issues were cut. We are therefore pleased that the report retained statements like these:

- There is a people component in the activities of every sector of the Science and Technology plan (p.89)
- Adequate planning necessarily includes consideration of the social contribution to change so it is important to gather statistics and monitor social variables in an ongoing way.
- Social science can provide data to evaluate alternative plans.
- It can monitor changes, provide early warning signals, and implement prevention and early intervention research.
- The educational plug comes under the heading of human development (p.90).
- It is important for social science to direct research towards increasing the effectiveness of services, programmes and treatments,

and so reducing problems which call for resources.

- There is a need for an information data base and a research index for the social sciences.

Surprisingly, the Science Technology plan carries three special considerations for social science research - commonplace knowledge for my audience today, but a real victory in holding important space in the report and hopefully taking a stand on people research being equal in importance but different in kind from the natural sciences. These three issues were:

- Some control over the number and type of demands made on the people of New Zealand to respond to research inquiries may be necessary because the people being studied can become reluctant to co-operate.
- The people who supply the data in social science research have to be consulted and considered by the researcher, not only for ethical reasons but also for reasons of courtesy and maintaining confidence in the research. Consultation takes professional time but is essential.
- When people are participants as research informants the researcher has a responsibility to report back to the people studied. This is a necessary cost in research budgets (p.91).

That, in my opinion, is the most social science-based statement that we managed to get into the report.

There is quite a long section on education in the Science Plan. Contributions to a workshop made by NZCER and the Department of Education's research staff bear some of the responsibility for the quality of the submissions which survived. In summary form it says these kinds of things:

The objective of research is to provide a knowledge base for effective policies directed to delivering high quality education for all (p.115). It is essential that research activities continue on a number of fronts:

- to get demographic information and roll projections at regional as well as national levels,
- to carry out surveys to provide information for decision making,
- to provide information for the evaluation of policies and practices,
- to provide equality of opportunity to take advantage of that education,
- and to continue research into many facets of education and of people from preschool to adult levels.

We were less skilful in arguing the causes of Employment, Justice and Law and Order, Welfare and Economics.

And for the last word, the last paragraph of the Science and Technology Plan says:

> Furthermore, the three largest areas of government spending are education ($1652 million), health ($1768 million) and social welfare ($3700 million). R and D expenditure is less than 0.1% of these votes. Questions are raised as to whether this level of R and D is adequate to ensure flexible policies and to provide the understanding and skills to cope with rapid technological and social change (Science and Technology Plan, 1984, p.117).

The advantage of an entry in the Science Plan is that it can be pointed to and appealed to, to support a policy or request. The disadvantage may be that, if there is not a form of words in the strategy to act as the umbrella, it may be harder to get some policy through. I hope I have been able to convince you that it will be helpful for your professional work to ensure that you have input each year to the Science Plan strategy. You must monitor where the Minister of Science's departments' general policies are, and you may be able to secure the insertion of a form of words for the strategy that you would like to have developed. Remember, this is the umbrella or framework; the tactics and specific projects follow within the strategy that has been approved.

Can I urge you to work for the strengthening of the whole Social Science enterprise, of which educational research in this country is one of the strongest sectors? I welcome the strength of the Association For Research in Education, because it is my belief that the professional organisations for the various social science disciplines will need to interest themselves in the issues I have been discussing as soon as possible, separately, or better still, in some concerted effort.

I welcome the formation of the Association of Social Science Researchers. I believe that they will need to be a strong professional group in the future concerned with issues that affect their work. I think that the educational researchers should be in there working with them.

Another important feature of recent changes is that social scientists can now be appointed to the Science Officer class positions in government departments. Committee D of NRAC sees this as very important for improving the career structure for social scientists in government departments. For a period both the directors of research on government departments and the social science researchers will have to put people forward for this classification. If there is a reluctance to translate people to the Science Officer class then in time it will appear to others

to be a confirmation of the pessimist's position that social scientists do not qualify.

Finally in this area of professional development push for advanced training opportunities for social scientists. Urge them to compete for and win fellowships, like the NRAC fellowships, and look for ways of bringing in new ideas on a fellowship basis from overseas.

These comments are directed towards issues of equality of status with science researchers.

The last report I will refer to does not recognise the existence of NZCER and hardly mentions social science research. Cabinet decisions on Science and Technology policy are based on the work of the Cabinet committee on Science and Technology chaired by the Minister of Science. The Cabinet Committee on Science and Technology has two main sources of advice, NRAC and the Officials Committee with membership from the government departments involved in the matter under consideration. This came under review very recently when the Minister of Science and Technology asked for a review of the structures for advice to government. The terms of reference ask whether NRAC should be revamped or replaced. The membership of that committee did not include any person with an interest in social science research. That committee under the chairmanship of Dr. Probine of the State Services Commission has reported to the Minister of Science. The report is entitled **Report on Science and Technology Policy Formation** (May, 1984).

This is a report which social science researchers in New Zealand must read very carefully and think about insightfully. I accept that this is a report to the Minister of Science about science research but **the absence of attention to any significant matters relating to social science is very disturbing.** The recommendations suggest that there will/should be a Medical Research Committee, a Social Science Research Committee, and a Science Research Committee each dispersing research funds and that there will be a Science and Technology Council with a salaried chairman responsible for research strategies.

So, the Report on Science and Technology Policy Formation would

- replace NRAC with a Science and Technology Council which would write the strategic plan, outline broad priorities for research, publicize issues, opportunities and priorities, advise government on the supportive context and how it can be enhanced, advise on fostering investment and innovation in industry, identify impediments to development of science and technology and so on...
- there would be eight members for three years and a fulltime chairman

- and under its umbrella three committees would disperse funds:

a Medical Research Committee	($5,000,000)
a Social Science Committee	($ 250,000)
a Science Committee	($1,500,000)

The Science Committee's funds would draw $300,000 from the UGC grant, with $1.2 million met by compensatory savings from present Science Budget departments, say $600,000, and the remainder from Vote Education, say $600,000. I want to know what that last statement means. This is a piece of Treasury-type bookkeeping which says that if you make a recommendation you have to say where the funds are coming from. The report says, in effect, that the Social Science Research Fund committee can get along on a budget of $250,000, a Medical Research Committee on $5,000,000 and a new Science Council will distribute funds for science and technology to the tune of $1,500,000 of which a fifth will come from UGC, and Vote Education has been nominated to redistribute some of its resources to the Minister of Science and Technology's use.

There is no discussion of any new roles for the SSRFC to work for improvements of social science research infrastructure. There is no mention of more money for SSRFC. One reason for this neglect of reference to social science research could be that it is not considered the Minister of Science's territory. Very well, that would leave the social scientists out on a limb, by themselves, ot really united, and with no collective input should somebody decide to cut off part of that limb. They are protected by their departments, perhaps. However, I would not count on it. All Committee D's work to have social scientists recognised as people equivalent in interest, qualification, quality of endeavour with scientists and worthy of career recognition and status is ignored. In this report they do seem not to come under the auspices of science advice policy.

Non-social science colleagues on NRAC were surprised at my interpretation of this absence of discussion as ominous. However, I would argue that the weakest position that social science research could be placed in would be to be omitted from the discussion. If the proposed Science and Technology Council included among its members two social scientists from different disciplines, and if a subcommittee structure like NRAC's continued to exist so that a wider range of social science views could be tapped on a regular basis on all issues we would be no worse off. However, when there are no words in the text to secure such things, and the present committee is disbanded I think I might be permitted to smell malice by oversight, to see the gains for social science receding unless some important measures are taken in relation to

the new SSRFC. Instead of the strong committee to fight for social science and its further development that Couchman (1984) called for, we will have the Co-ordinating and Advisory Committee on Social Science Research in Government (a group of senior officers responsible for social science in government departments who meet to discuss problems confronting them) and the Association of Social Science Researchers. This is a small army to fight for improved recognition of the worth of social science research alongside other science endeavours.

It seems to me that in the face of a document that ignores social science and promulgates massive changes in research funding and organization, the Science and Technology Plan is all the protection that social science research in government departments has at the present time. Major revisions along the lines of the Probine report will go to discussion, legislative drafting and law within 12 months.

Perhaps an alternative structure could evolve from this shake-up to strengthen social science research. I submit to educational researchers that you need a strong social science research community. You may be well-organized with a long history of productive work, but you and your funding are not prortected from the whim of any Minister to decide that the direction of your endeavours is not worthy of support. I believe that, whatever the source of funding, the acceptance of social science research as a contributing and worthwhile and scientific endeavour in the scientific community is the best protection that your profession can have in the long run.

I will leave you with those stimulating uncertainties from the Probine report and say that the next episode has not been written. Some people assure me that all will be well. What is in writing gives me no assurance of that. I am not prepared to take for granted what is not written. What I can say is that the Education section of the Science and Technology Plan is relatively strong, and could be used in your planning. The moves of the next few months will be interesting, and probably critical for social science research. I suggest that you check the Couchman report, check the Science and Technology Plan, check the Probine report, keep a keen eye on funding issues. Remember, the old ways have already changed and NRAC no longer advises on budget issues. You are in other hands. Committee D will continue to exist for most of the next year, and its Deputy Chairman, Dr. Bruce Jamieson is also a member of the SSRFC.

It may be that the writers of the 1985 Science Plan could be informed by a paper which argues the place in a balanced social science research network for research units which are independent of departmental

policy like NZCER and the Institute for Economic Research. If that is an idea which appeals, it would have to reach them before the end of August of this year.

Another useful move could be to support a doubling of SSRFC's resources and a change in funding policies so that NZCER and/or government department research units could apply to that fund for special projects. At present they are excluded from application.

While I fully recognise the pronounced differences between the role of NZCER in New Zealand and the ACER in Australia, particularly in this association with social science research, I would like to conclude with a summary statement from the **Future Directions** recommended by the review panel on ACER.

The Panel saw the need

- for a more active involvement in debate with the educational community,
- for a more active role in research co-ordination,
- for strengthening the visibility of the relevance of its research for policy issues,
- for more research directed to educational practices,
- for more involvement of the wider educational community in the activities of the research institution,
- and for the dissemination of quality research at various levels (Swan, 1983: 149).

I recognize that NZCER consistently addresses most of these activities. For funding purposes you will have to continue to educate people all over again that this is so.

References

1. Couchman, P. Policy Making for Social Science in Government Departments. **DSIR Social Science Series 1**, Wellington, 1984.
2. Robertson, E. (Chairman) **The Working Party Report on the Training of Social Science Researchers.** Wellington: NRAC, 1984.
3. NRAC. **Science and Technology Plan, 1984: The First Steps** Wellington, NRAC, May 1984.
4. Probine, M.C. (Chairman) **Report on Science and Technology Policy Formation.** Wellington, State Services Commission, May, 1984.

WORKSHOP REPORTS: MAJOR ISSUES FOR EDUCATIONAL RESEARCH

Reporter One: **Myra Harpham**

One of the early questions that we addressed, and I think it is important, was: should educational researchers assist society to adapt to the changes expected in the next 15 years by doing early research or, on the other hand, should educational researchers be thinking of influencing what happens? The rest of the discussion was really based on acceptance of the first of those questions, that work should assist adaptation.

Three major areas of research were raised, firstly: what are the big issues of the next 15 years that can be anticipated for which research programmes can be developed to provide information when required? The second area was research into learning as an ongoing process, including the new knowledge we might gain on how information is processed from work done in conjunction with technologists of information processing. This, of course, could eventually lead to possible changes in educational psychology. And the third area that was addressed was the politics of the survival of educational researchers in the next 15 years.

Now I'd just like to take each of these and go into a little more depth on the major issues. The changes in the New Zealand economy are obviously a big issue that we're all having to face. Researchers should be anticipating the changes in society that will result, and changes in educational institutions, e.g., what happens if the fragmentation of the education system continues? What are the new research issues? It was felt that client-centred educational research could become more important. There should be more talk with people outside the educational fraternity to monitor their changing needs as they perceive them.

Another of the big issues was how to use information processing technologies for problem-solving; that needs a lot of research. How can the impersonal technology be counteracted? How can people be assisted to

cope with change? What recurrent education is needed? How should a system of lifelong learning be maintained? What new perspectives are needed in this area? Demographic changes were one of the other big issues. What are these going to mean for different lifestyles or for education? Given that researchers or society value diversity, adaptability, enhancing individuals' values, democracy, creativity, problem-solving and meaningful learning, then in the area of ongoing learning, research into the needs of special groups would be important. Research into the suitability of our present system and its adaptability in providing for the educational needs of minorities is essential. Enhancing individuals' values, knowing more about how people actually learn, is required. More participatory forms of learning, and easier access to information should become important.

The other issue we discussed was how to survive in the next 15 years. The thought that educational researchers need to embed themselves in the community more - to make themselves more indispensable by becoming agents of community change - was discussed. Another was that researchers from other disciplines have a worthwhile contribution to make to educational research; these links should be strengthened. And I would think that is probably a survival strategy as well.

Reporter Two: Cedric Croft

Our discussion was very diffuse. We began by looking at some of the issues that had been identified on the first day such as multiculturalism, unemployment, and research for practice. It seemed to us that although we were happy about the interface between research and practice at the classroom level, we had much less agreement on the nature of the issues and the important questions to be asked. Like a good research group, we continually returned to trying to clarify the questions. It was summed up well by one member of the group who said that three important questions needed to be addressed: What questions should be asked? Who is to do the research that follows from these questions? And how should this research be funded?

Many of our specific discussions returned to questions concerning the role of examinations. Without acknowledging the source, it has been said that "The tint of the spectacles will largely determine your answer to the question". Perhaps the prime function of research may be to clarify the questions rather than to provide answers and we spent considerable time on this notion of clarifying questions.

At one stage we referred to the four outcomes of research mentioned in John Keeves's paper and we wondered if we could list them in order of importance or whether we could see a hierarchical relationship among them. From the university perspective there was a strong plea for pluralism, for people to follow their intellectual interests, as it were to go where their nose took them and to see what resulted thereafter. The point was also made that it may be a straightforward matter to pose the important question of the relationship of research to policy, and this related to a point made by Mr. Wellington in his introductory remarks.

In fact, the necessary information is not readily obtainable; it needs time and effort. Looking again at examinations, for example, the point was made that basic research should be seen as going hand in hand with both the development of policy and with the specific administration and associated work required to underpin and to set the examination.

Something else that could have led to very fruitful discussion but did not was raised in passing: have the controversial questions in New Zealand education ever been researched? Such questions include, for example, corporal punishment. Has it been researched in objective ways? What about sex education? Aspects of bilingualism? Questions of standards? Questions of the effects of streaming? Like researchers we spent a good deal of time attempting to clarify the questions, without attempting to answer them.

Reporter Three: **Whatarangi Winiata**

We were told that we should look for priorities in research ideas and topics, and that we should not limit our discussion to the field of educational research. So each person in the group was asked to specify those things that they found of great concern; then we went back and tried to rank them.

For the top priority, two closely related topics emerged as crucial: Taha Maori, i.e., its definition, and the introduction and related development of appropriate curriculum materials, particularly in view of the talk on Maori withdrawal and alternative schools.

The second priority: inequality, access and achievement, with a need for definition and research into sex differences in achievement.

Priority three: bilingual education, what's happening, how effective it is.

Priority four: there are a number of issues in this category. One group relates to school qualifications, training and employment, e.g., evaluation of the Labour Department programme, STEPS. Are technical institutes carrying out an appropriate job? Another group concerns education management, the definition of leadership, school climate, and administration in education. Another category: teacher performance, including what happens in the first year of teaching, the effect of in-service courses, and the field of teacher survival (i.e., burnout, stress, ageing). Ancther field is policy control - the role of the powerless - and includes agenda setting, the locus of pcwer, pakeha veto, the old versus the young, and male versus the female. And, finally, continuing education: trends, participants, and their characteristics.

Priority five: the mobility of skills, and impediments to the mobility of people who have skills but may not be suited to the particular profession they are in. Superannuation schemes and technological developments were seen as impediments. Computer technology in the classroom was considered important, as were the communication and presentation of research results to teachers, parents and politicians.

These were the group's five priorities, covering a range of research topics identified by going around the group.

PARTICIPANTS

Professor Ray S. Adams, Council Chairman, NZCER.
Dr. Noeline Alcorn, Auckland Teachers College.
Nena Benton, NZCER.
Dr. Richard Benton, NZCER.
Peter Boag, Council Member, NZCER.
Dr. Jenny Bunce, N.Z. Association for Research in Education.
Vince Catherwood, N.Z. Planning Council.
Professor Margaret Clark, Victoria University of Wellington.
Professor Marie Clay, University of Auckland.
James Collinge, Victoria University of Wellington.
Cedric Croft, NZCER.
Dr. Syd S. Dunn, A. O.
Brian Easton, N.Z. Institute of Economic Research.
Professor Warwick Elley, University of Canterbury.
Professor Ted Glynn, University of Otago.
Dr. Lynette Hardie-Wills, NZCER.
Myra Harpham, Publisher and Consultant.
Jean Herbison, Council Member, NZCER.
Wally Hirsh, Karori West Normal School.
Sir Frank Holmes, Victoria University of Wellington.
Raylee Johnston, NZCER.
Dr. John Keeves, Australian Council for Educational Research.
David Kerr, NZEI.
Ian Livingstone, NZCER.
Margaret Malcolm, Wellington Teachers College.
Ruth Mansell, NZEI.
Edie Martin, N.Z. Free Kindergarten Union.
Dr. Geraldine McDonald, NZCER.
Associate Professor David McKenzie, University of Otago.
Roy McKenzie, McKenzie Education Foundation.
Dr. Anne Meade, NZCER.
Dr. David Mitchell, University of Waikato.
Wayne Ngata.
Dr. George Parkyn.
Major General Les Pearce, Council Member, NZCER.
David Philips, NZCER.
Neil Reid, NZCER.
Margery Renwick, NZCER.
Llyn Richards, NZCER.
Joan Ropiha.
Margaret Rosemergy, NZCER.
Turoa Royal, Wellington High School.
Jack Shallcrass, Council Member, NZCER.
Cara Shouler, NZCER.
Heather Simpson, Association of University Teachers.
Professor Ivan Snook, Massey University.
Brian Stokes, N.Z. Teachers College Association.
Ava Szakats.
Ross Tasker, Wellington Teachers College.
Dr. Hans Wagemaker, Department of Education.
John Watson, NZCER.
Lorraine Webber, Association of Teachers in Technical Institutes.
Nancy Wilson, N.Z. Institute of Economic Research.
Professor Whatarangi Winiata, Victoria University of Wellington.